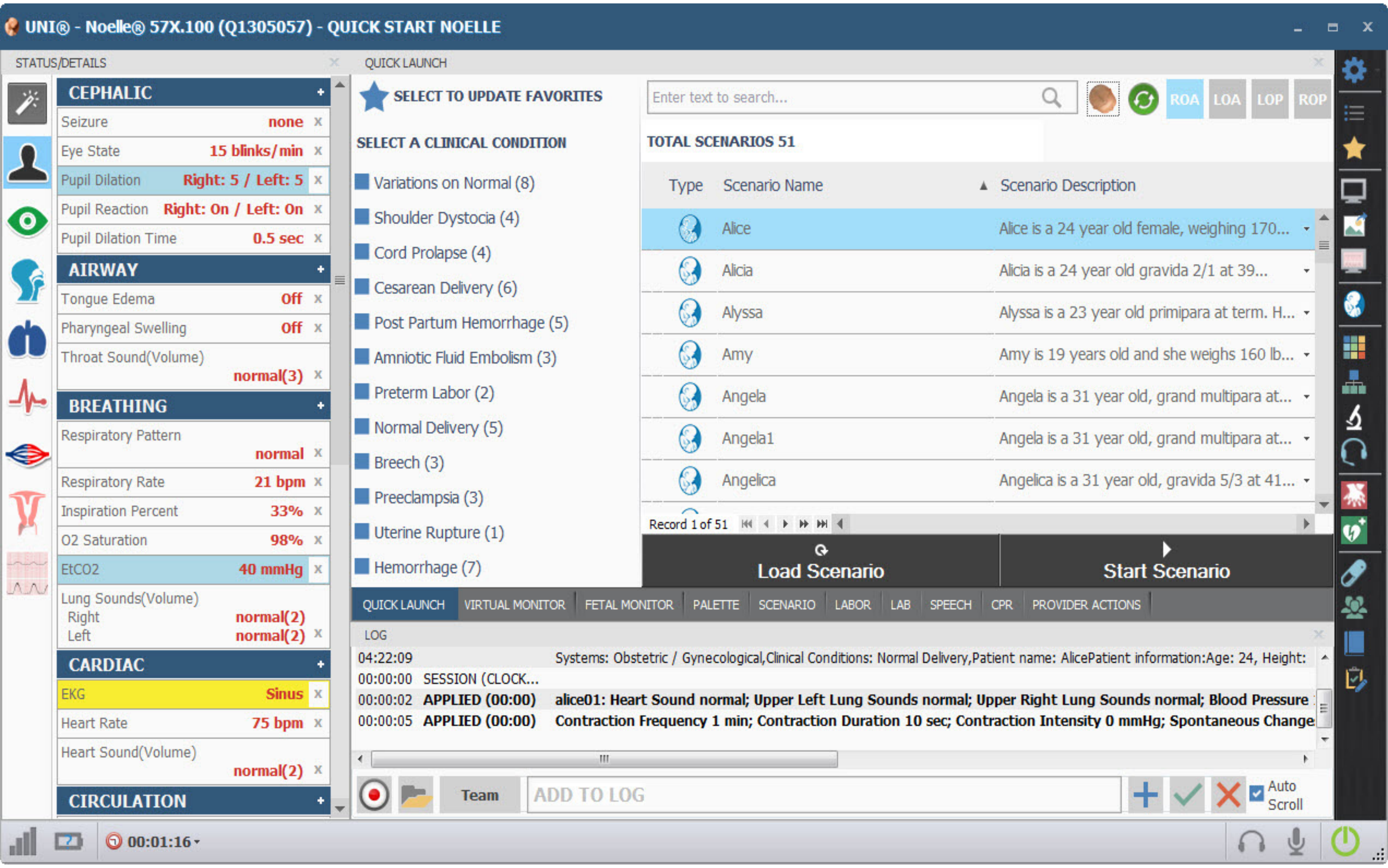
UNI®

Control Software for Gaumard® Simulators


UNI® - Noelle® 57X.100 (Q1305057) - QUICK START NOELLE
STATUS/DETAILS
QUICK LAUNCH
CEPHALIC
AIRWAY
BREATHING
CARDIAC
CIRCULATION
SELECT TO UPDATE FAVORITES
SELECT A CLINICAL CONDITION
Enter text to search...
ROA
LOA
LOP
ROP
TOTAL SCENARIOS 51
Record 1 of 51
Load Scenario
Start Scenario
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS
LOG
Team
ADD TO LOG
Auto Scroll
00:01:16

CEPHALIC

Seizure	none
Eye State	15 blinks/min
Pupil Dilation	Right: 5 / Left: 5
Pupil Reaction	Right: On / Left: On
Pupil Dilation Time	0.5 sec

AIRWAY

Tongue Edema	Off
Pharyngeal Swelling	Off
Throat Sound(Volume)	normal(3)

BREATHING

Respiratory Pattern	normal
Respiratory Rate	21 bpm
Inspiration Percent	33%
O2 Saturation	98%
EtCO2	40 mmHg
Lung Sounds(Volume) Right	normal(2)
Left	normal(2)

CARDIAC

EKG	Sinus
Heart Rate	75 bpm
Heart Sound(Volume)	normal(2)

- Variations on Normal (8)
- Shoulder Dystocia (4)
- Cord Prolapse (4)
- Cesarean Delivery (6)
- Post Partum Hemorrhage (5)
- Amniotic Fluid Embolism (3)
- Preterm Labor (2)
- Normal Delivery (5)
- Breech (3)
- Preeclampsia (3)
- Uterine Rupture (1)
- Hemorrhage (7)

Type	Scenario Name	Scenario Description
	Alice	Alice is a 24 year old female, weighing 170...
	Alicia	Alicia is a 24 year old gravida 2/1 at 39...
	Alyssa	Alyssa is a 23 year old primipara at term. H...
	Amy	Amy is 19 years old and she weighs 160 lb...
	Angela	Angela is a 31 year old, grand multipara at...
	Angela1	Angela is a 31 year old, grand multipara at...
	Angelica	Angelica is a 31 year old, gravida 5/3 at 41...

```
04:22:09                      Systems: Obstetric / Gynecological,Clinical Conditions: Normal Delivery,Patient name: AlicePatient information:Age: 24, Height:
00:00:00  SESSION (CLOCK...
00:00:02  APPLIED (00:00)  alice01: Heart Sound normal; Upper Left Lung Sounds normal; Upper Right Lung Sounds normal; Blood Pressure
00:00:05  APPLIED (00:00)  Contraction Frequency 1 min; Contraction Duration 10 sec; Contraction Intensity 0 mmHg; Spontaneous Change
```

Gaumard®
Simulators for Health Care Education

Gaumard simulators are interactive educational systems developed to assist certified instructors. Gaumard simulation systems do not substitute a comprehensive understanding of the subject matter and are not intended to be used for clinical decision-making..

User Guide 15.1.1
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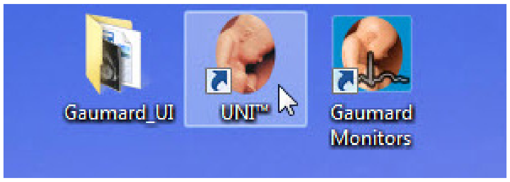
Working with UNI®

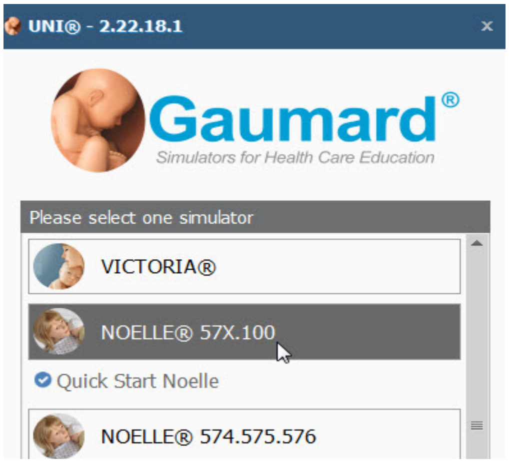
Initializing the Simulator

After reading the manufacturer's care and caution information, press the power button to turn on the Tablet PC.

The UNI software initializes the simulator. Double click the UNI icon on the tablet's home screen to start.


Gaumard_UI
UNI™
Gaumard Monitors

The simulator selection menu is shown. Select Noelle and click "Start".


UNI® - 2.22.18.1
×
Gaumard®
Simulators for Health Care Education
Please select one simulator
VICTORIA®
NOELLE® 57X.100
Quick Start Noelle
NOELLE® 574.575.576

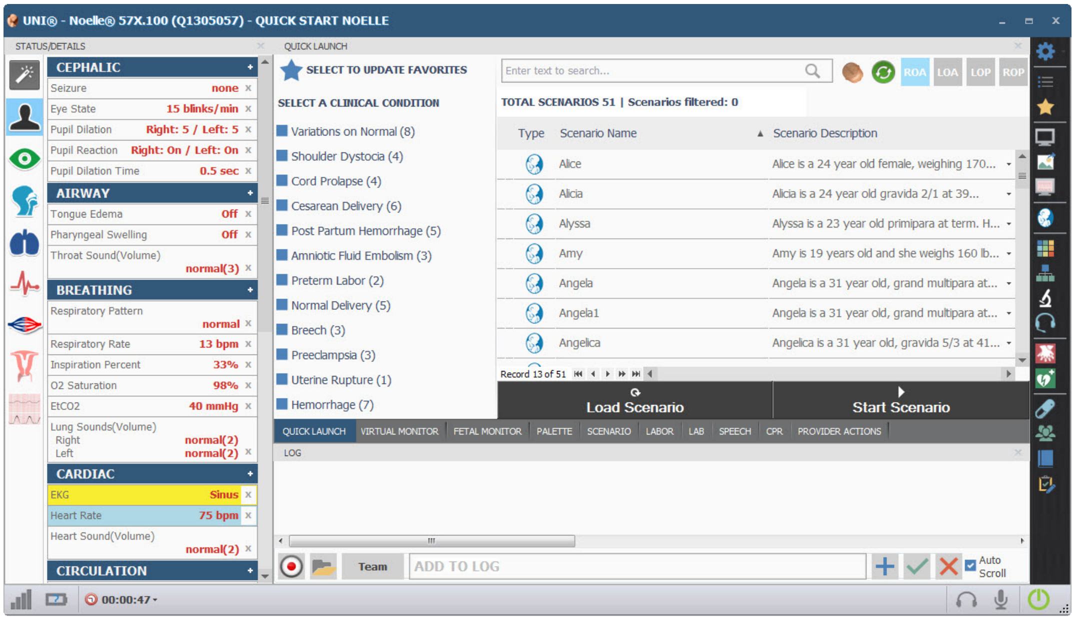
The wireless link between UNI and the simulator is established within 1 minute.

The available profiles for each simulator will be displayed when the simulator is selected. For more information about managing and creating new profiles, refer to the "Menu Bar" section.

UNI Interface

The UNI software is used to control the simulator, monitor the vital signs, and evaluate the provider's performance. The simulation technician or instructor carrying out the simulation operates the UNI software

The UNI control elements and scenario programming procedures are consistent throughout the Gaumard family of high fidelity simulators. Some software controls and features covered in this guide may be hidden depending on the simulator's hardware configuration and optional upgrades.


UNI® - Noelle® 57X.100 (Q1305057) - QUICK START NOELLE
STATUS/DETAILS
QUICK LAUNCH
SELECT TO UPDATE FAVORITES
Enter text to search...
ROA
LOA
LOP
ROP
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS
LOG
Team
ADD TO LOG
Auto Scroll
Load Scenario
Start Scenario
00:00:47

CEPHALIC

Seizure	none
Eye State	15 blinks/min
Pupil Dilation	Right: 5 / Left: 5
Pupil Reaction	Right: On / Left: On
Pupil Dilation Time	0.5 sec

AIRWAY

Tongue Edema	Off
Pharyngeal Swelling	Off
Throat Sound(Volume)	normal(3)

BREATHING

Respiratory Pattern	normal
Respiratory Rate	13 bpm
Inspiration Percent	33%
O2 Saturation	98%
EtCO2	40 mmHg
Lung Sounds(Volume) Right	normal(2)
Left	normal(2)

CARDIAC

EKG	Sinus
Heart Rate	75 bpm
Heart Sound(Volume)	normal(2)

CIRCULATION

SELECT A CLINICAL CONDITION

- Variations on Normal (8)
- Shoulder Dystocia (4)
- Cord Prolapse (4)
- Cesarean Delivery (6)
- Post Partum Hemorrhage (5)
- Amniotic Fluid Embolism (3)
- Preterm Labor (2)
- Normal Delivery (5)
- Breech (3)
- Preeclampsia (3)
- Uterine Rupture (1)
- Hemorrhage (7)

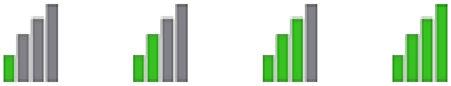
TOTAL SCENARIOS 51 | Scenarios filtered: 0

Type	Scenario Name	Scenario Description
	Alice	Alice is a 24 year old female, weighing 170...
	Alicia	Alicia is a 24 year old gravida 2/1 at 39...
	Alyssa	Alyssa is a 23 year old primipara at term. H...
	Amy	Amy is 19 years old and she weighs 160 lb...
	Angela	Angela is a 31 year old, grand multipara at...
	Angela1	Angela is a 31 year old, grand multipara at...
	Angelica	Angelica is a 31 year old, gravida 5/3 at 41...

Record 13 of 51

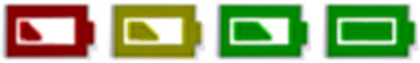
CONNECTION STATUS

The communication indicator displays the status of the radio link between the tablet's USB RF module and the simulator. Full bars indicate excellent communication (i.e., normal operation).



BATTERY INDICATOR

The battery status indicator progresses as the battery in the simulator is used. The exclamation mark indicator is shown when there is no communication and battery information cannot be retrieved.



When the battery icon is depleted, the simulator is set to STAND-BY mode automatically to protect some of the simulator's internal components. Simulator will not initialize until connected to the charger or the battery is replaced with a fully charged spare.

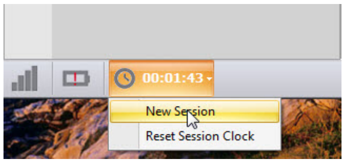
Internal battery duration is approximately 2 hours

WARNING

Turn Simulator OFF before replacing the battery. Failure to do so could result in serious damage to the system.

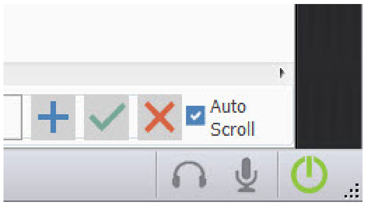
SESSION CLOCK

The session timer allows the facilitator to maintain a chronological record for individual simulation sessions. The session timer can be reset from the file menu when a new simulation session begins, or by clicking the session time icon and then Reset Session Clock. Events during the simulation are logged in accordance to the session time.


00:01:43
New Session
Reset Session Clock

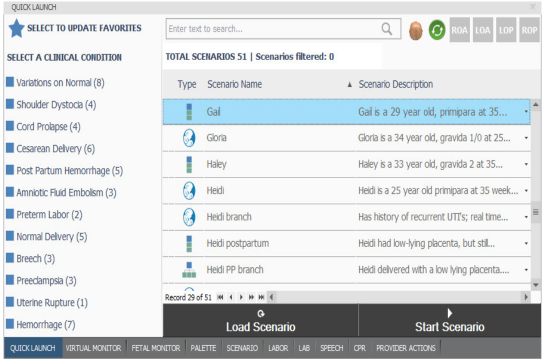
POWER/STAND-BY BUTTON

The standby button is located on the bottom right corner of the UNI software. Use the stand-by feature to conserve battery during lectures.


Auto Scroll

QUICK LAUNCH

The UNI interface opens up showing the quick launch page for the scenarios. This page is used to easily access the preprogrammed scenarios saved on each profile.


QUICK LAUNCH
SELECT TO UPDATE FAVORITES
SELECT A CLINICAL CONDITION
Variations on Normal (8)
Shoulder Dystocia (4)
Cord Prolapse (4)
Cesarean Delivery (6)
Post Partum Hemorrhage (5)
Amniotic Fluid Embolism (3)
Preterm Labor (2)
Normal Delivery (5)
Breech (3)
Preeclampsia (3)
Uterine Rupture (1)
Hemorrhage (7)
Enter text to search...
ROA
LOA
LOP
ROP
Load Scenario
Start Scenario
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS

TOTAL SCENARIOS 51 | Scenarios filtered: 0

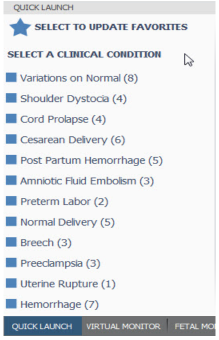
Type	Scenario Name	Scenario Description
	Gail	Gail is a 29 year old, primipara at 35...
	Gloria	Gloria is a 34 year old, gravida 1/0 at 25...
	Haley	Haley is a 33 year old, gravida 2 at 35...
	Heidi	Heidi is a 25 year old primipara at 35 week...
	Heidi branch	Has history of recurrent UTI's; real time...
	Heidi postpartum	Heidi had low-lying placenta, but still...
	Heidi PP branch	Heidi delivered with a low lying placenta....

Record 29 of 51

The first scenario from the list is selected as default. Also, the scenarios are distinguished with icons as linear, branched, or labor.

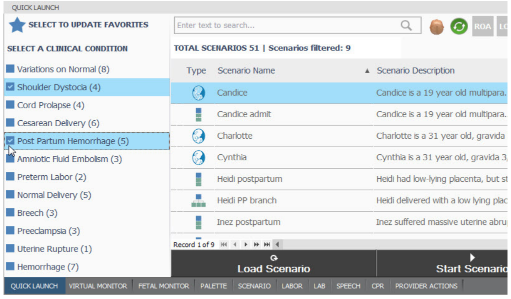
CLINICAL CONDITION

The scenarios are categorized by clinical condition to the left of this page; i.e. shoulder dystocia, cord prolapse, etc.


QUICK LAUNCH
SELECT TO UPDATE FAVORITES
SELECT A CLINICAL CONDITION
Variations on Normal (8)
Shoulder Dystocia (4)
Cord Prolapse (4)
Cesarean Delivery (6)
Post Partum Hemorrhage (5)
Amniotic Fluid Embolism (3)
Preterm Labor (2)
Normal Delivery (5)
Breech (3)
Preeclampsia (3)
Uterine Rupture (1)
Hemorrhage (7)
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MO

Select the scenario type as show below.

Notice that one or more scenario types can be selected at the time and the list of scenarios on the right will display only the scenarios included on the selected categories.


QUICK LAUNCH
SELECT TO UPDATE FAVORITES
SELECT A CLINICAL CONDITION
Variations on Normal (8)
☑ Shoulder Dystocia (4)
Cord Prolapse (4)
Cesarean Delivery (6)
☑ Post Partum Hemorrhage (5)
Amniotic Fluid Embolism (3)
Preterm Labor (2)
Normal Delivery (5)
Breech (3)
Preeclampsia (3)
Uterine Rupture (1)
Hemorrhage (7)
Enter text to search...
ROA
Load Scenario
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS

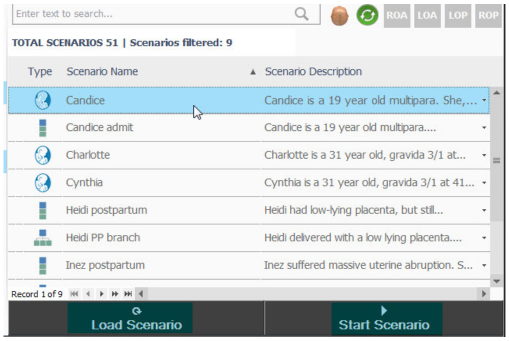
TOTAL SCENARIOS 51 | Scenarios filtered: 9

Type	Scenario Name	Scenario Description
	Candice	Candice is a 19 year old multipara.
	Candice admit	Candice is a 19 year old multipara.
	Charlotte	Charlotte is a 31 year old, gravida
	Cynthia	Cynthia is a 31 year old, gravida 3
	Heidi postpartum	Heidi had low-lying placenta, but st
	Heidi PP branch	Heidi delivered with a low lying plac
	Inez postpartum	Inez suffered massive uterine abru

Record 1 of 9

SELECTING THE SCENARIO

Click on one of the scenarios listed to highlight it and the scenario can be started immediately or loaded.

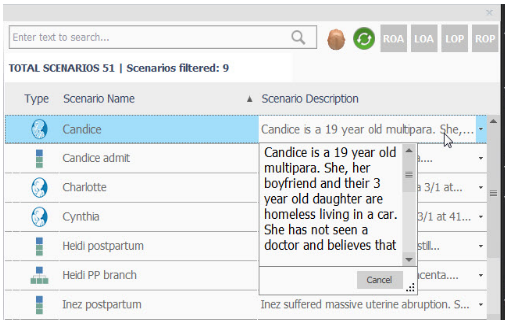

Enter text to search...
ROA
LOA
LOP
ROP
Load Scenario
Start Scenario

TOTAL SCENARIOS 51 | Scenarios filtered: 9

Type	Scenario Name	Scenario Description
	Candice	Candice is a 19 year old multipara. She,...
	Candice admit	Candice is a 19 year old multipara....
	Charlotte	Charlotte is a 31 year old, gravida 3/1 at...
	Cynthia	Cynthia is a 31 year old, gravida 3/1 at 41...
	Heidi postpartum	Heidi had low-lying placenta, but still...
	Heidi PP branch	Heidi delivered with a low lying placenta....
	Inez postpartum	Inez suffered massive uterine abruption. S...

Record 1 of 9

Click on the drop down arrow to the right to read a scenario description.


Enter text to search...
ROA
LOA
LOP
ROP
Cancel

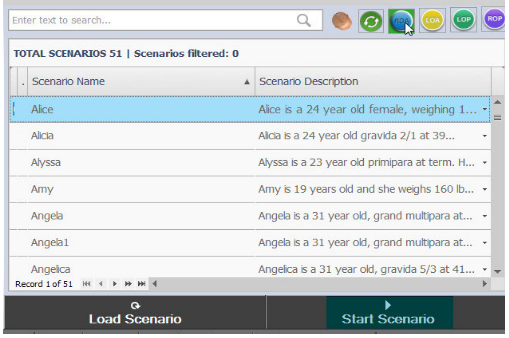
TOTAL SCENARIOS 51 | Scenarios filtered: 9

Type	Scenario Name	Scenario Description
	Candice	Candice is a 19 year old multipara. She,...
	Candice admit	...
	Charlotte	3/1 at...
	Cynthia	3/1 at 41...
	Heidi postpartum	still...
	Heidi PP branch	centa....
	Inez postpartum	Inez suffered massive uterine abruption. S...

Candice is a 19 year old multipara. She, her boyfriend and their 3 year old daughter are homeless living in a car. She has not seen a doctor and believes that

Clicking “Start Scenario” loads the appropriate scenario and starts it playing without the user having to do anything else with the control computer.

Notice that the position of the fetus should be selected before to click “Start scenario’ as shown below.


Enter text to search...
ROA
LOA
LOP
ROP

TOTAL SCENARIOS 51 | Scenarios filtered: 0

Scenario Name	Scenario Description
Alice	Alice is a 24 year old female, weighing 1...
Alicia	Alicia is a 24 year old gravida 2/1 at 39...
Alyssa	Alyssa is a 23 year old primipara at term. H...
Amy	Amy is 19 years old and she weighs 160 lb...
Angela	Angela is a 31 year old, grand multipara at...
Angela1	Angela is a 31 year old, grand multipara at...
Angelica	Angelica is a 31 year old, gravida 5/3 at 41...

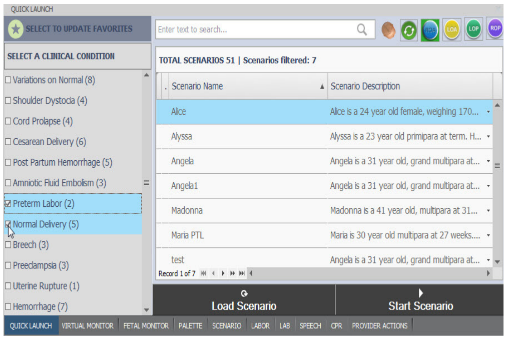
Record 1 of 51

Load Scenario
Start Scenario

Preparing the actual simulator for delivery must be done before activating quick launch scenarios. For complete information refer to the “Working with Simulator” section.

FAVORITES

There is also a “Favorites” feature added to the quick launch program. This feature allows users to reduce the number of scenarios highlighted to those within the categories that will be used most frequently.


QUICK LAUNCH
SELECT TO UPDATE FAVORITES
Enter text to search...
ROA
LOA
LOP
ROP

SELECT A CLINICAL CONDITION

- ☐ Variations on Normal (8)
- ☐ Shoulder Dystocia (4)
- ☐ Cord Prolapse (4)
- ☐ Cesarean Delivery (6)
- ☐ Post Partum Hemorrhage (5)
- ☐ Amniotic Fluid Embolism (3)
- ☑ Preterm Labor (2)
- ☑ Normal Delivery (5)
- ☐ Breech (3)
- ☐ Preeclampsia (3)
- ☐ Uterine Rupture (1)
- ☐ Hemorrhage (7)

TOTAL SCENARIOS 51 | Scenarios filtered: 7

Scenario Name	Scenario Description
Alice	Alice is a 24 year old female, weighing 170...
Alyssa	Alyssa is a 23 year old primipara at term. H...
Angela	Angela is a 31 year old, grand multipara at...
Angela1	Angela is a 31 year old, grand multipara at...
Madonna	Madonna is a 41 year old, multipara at 31...
Maria PTL	Maria is 30 year old multipara at 27 weeks....
test	Angela is a 31 year old, grand multipara at...

Record 1 of 7

Load Scenario
Start Scenario
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS

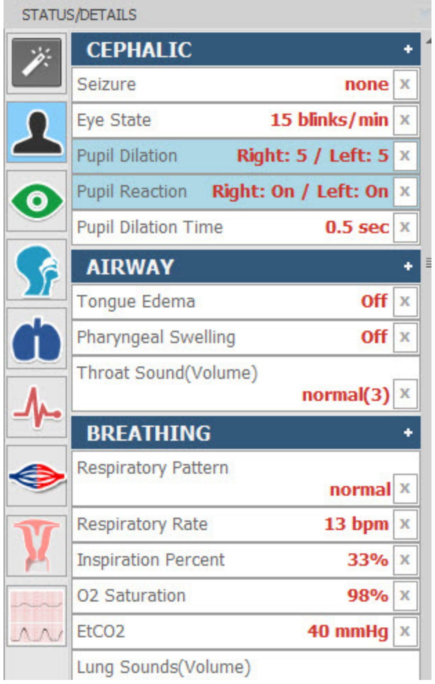
Enable the “Favorites” feature by clicking the start icon. Then select the categories or scenario types to be stored under this feature.

STATUS/DETAILS CONTROLS

The Status/Details panel is used to monitor and control the simulator’s vital signs. The individual parameter controls displayed on the details tab provide the simplest method for controlling the simulator’s vital signs, sounds, and features.

The Status/Details tab displays the vital signs controls in a list format.

SYSTEMS LIST VIEW


STATUS/DETAILS

CEPHALIC

Seizure	none
Eye State	15 blinks/min
Pupil Dilation	Right: 5 / Left: 5
Pupil Reaction	Right: On / Left: On
Pupil Dilation Time	0.5 sec

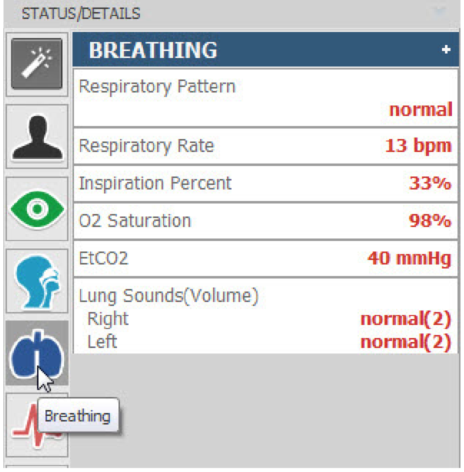
AIRWAY

Tongue Edema	Off
Pharyngeal Swelling	Off
Throat Sound(Volume)	normal(3)

BREATHING

Respiratory Pattern	normal
Respiratory Rate	13 bpm
Inspiration Percent	33%
O2 Saturation	98%
EtCO2	40 mmHg
Lung Sounds(Volume)	

The vital signs controls are divided into separate categories. Click through the categories to view the controls available for the current simulator configuration.

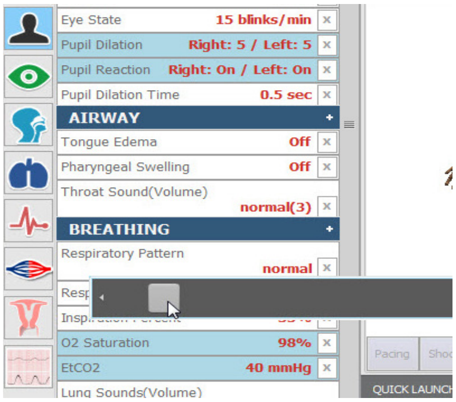

STATUS/DETAILS
Breathing

BREATHING

Respiratory Pattern	normal
Respiratory Rate	13 bpm
Inspiration Percent	33%
O2 Saturation	98%
EtCO2	40 mmHg
Lung Sounds(Volume)	
Right	normal(2)
Left	normal(2)

CHANGING VITAL SIGNS

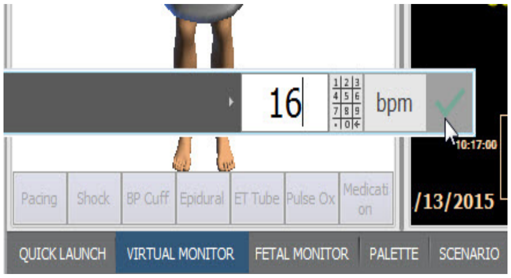
To adjust numerical values click the slider control. (e.g. heart rate, blood pressure, respiratory rate, etc.).



Eye State 15 blinks/min
Pupil Dilation Right: 5 / Left: 5
Pupil Reaction Right: On / Left: On
Pupil Dilation Time 0.5 sec
AIRWAY
Tongue Edema Off
Pharyngeal Swelling Off
Throat Sound(Volume) normal(3)
BREATHING
Respiratory Pattern normal
O2 Saturation 98%
EtCO2 40 mmHg
Lung Sounds(Volume)

Pacing
Shoc
QUICK LAUNCH

Alternatively, use the keyboard for manual entry and click the green checkmark to confirm the change.

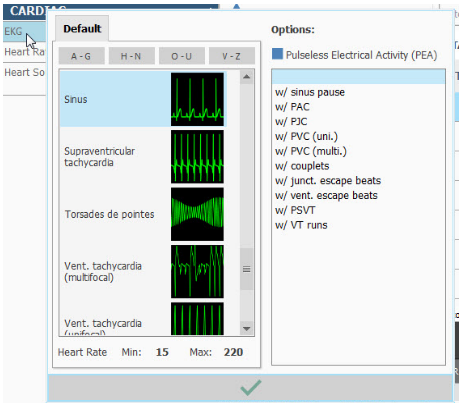


16 bpm

10:17:00
/13/2015
Pacing
Shock
BP Cuff
Epidural
ET Tube
Pulse Ox
Medication
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO

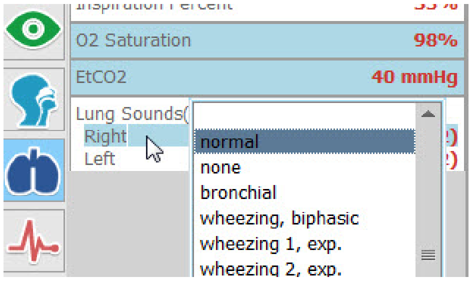
To change patterns, sounds, and rhythms, click on the specific control to display the library (e.g. EKG rhythms, heart and lung sounds,respiratory patterns, etc.)

Notice that the EKG library includes a preview of the cardiac waveforms and



CARDIAC
EKG
Heart Ra
Heart So
Default
A - G
H - N
O - U
V - Z
Sinus
Supraventricular tachycardia
Torsades de pointes
Vent. tachycardia (multifocal)
Vent. tachycardia (unifocal)
Options:
Pulseless Electrical Activity (PEA)
w/ sinus pause
w/ PAC
w/ PJC
w/ PVC (uni.)
w/ PVC (multi.)
w/ couplets
w/ junct. escape beats
w/ vent. escape beats
w/ PSVT
w/ VT runs

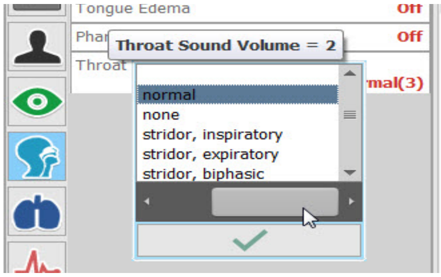
Heart Rate Min: 15 Max: 220



O2 Saturation 98%
EtCO2 40 mmHg

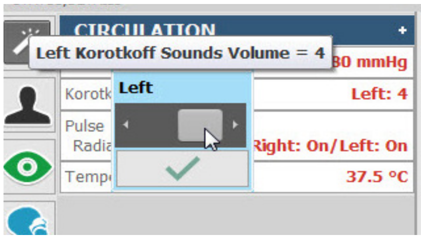
Lung Sounds(
Right
Left
normal
none
bronchial
wheezing, biphasic
wheezing 1, exp.
wheezing 2, exp.

Click the slider control below the sound library to adjust the volume of the sounds.



Tongue Edema Off
Throat Sound Volume = 2

Phar
Off
Throat
mal(3)
normal
none
stridor, inspiratory
stridor, expiratory
stridor, biphasic



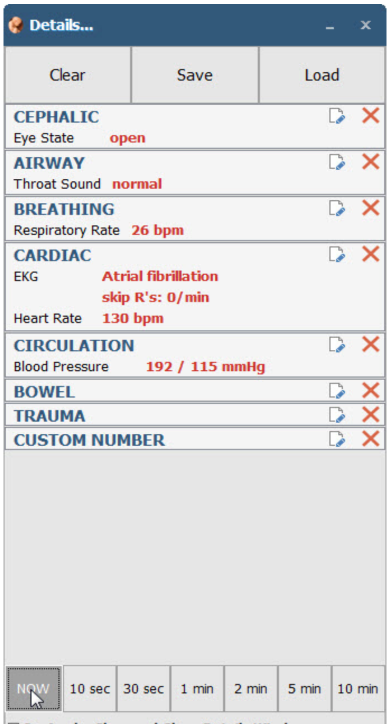
Left Korotkoff Sounds Volume = 4

CIRCULATION
80 mmHg
Korotk
Left
Left: 4
Pulse
Radia
Right: On/Left: On
Temp
37.5 °C

APPLYING CHANGES

No changes will be made to the simulator's condition until the new settings are submitted using the "Apply" panel.

After the list of changes is created, click "NOW" to update the vital signs instantly. Alternatively, Click a trending timer to update numerical vital sign parameters (e.g. heart rate, blood pressure) gradually.


Details...
Clear
Save
Load
NOW
10 sec
30 sec
1 min
2 min
5 min
10 min

CEPHALIC
Eye State open

AIRWAY
Throat Sound normal

BREATHING
Respiratory Rate 26 bpm

CARDIAC
EKG Atrial fibrillation
skip R's: 0/min
Heart Rate 130 bpm

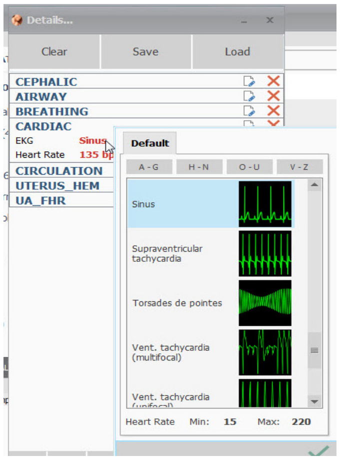
CIRCULATION
Blood Pressure 192 / 115 mmHg

BOWEL

TRAUMA

CUSTOM NUMBER

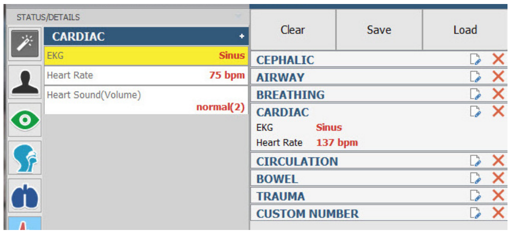
Vital signs can be edited by clicking on the specific parameter


Details...
Clear
Save
Load
CEPHALIC
AIRWAY
BREATHING
CARDIAC
CIRCULATION
UTERUS_HEM
UA_FHR
Default
A - G
H - N
O - U
V - Z
Sinus
Supraventricular tachycardia
Torsades de pointes
Vent. tachycardia (multifocal)
Vent. tachycardia

EKG Sinus
Heart Rate 135 bpm
Heart Rate Min: 15 Max: 220

Also, use the edit and remove tabs to edit a new parameter or remove an existing one.

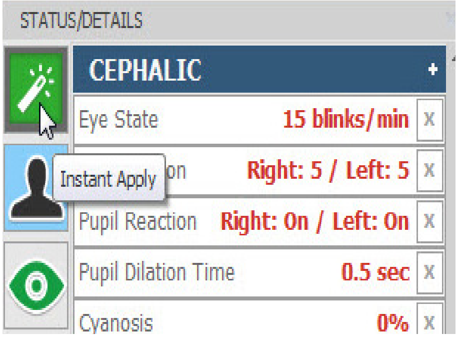
Notice that until the "apply" option is not selected ,the vital signs in the Status/Details panel will not reflect the new changes.


STATUS/DETAILS
CARDIAC
Clear
Save
Load
CEPHALIC
AIRWAY
BREATHING
CARDIAC
CIRCULATION
BOWEL
TRAUMA
CUSTOM NUMBER

EKG Sinus
Heart Rate 75 bpm
Heart Sound(Volume) normal(2)

CARDIAC
EKG Sinus
Heart Rate 137 bpm

Enable the "instant apply" option and click the control to change the vital sign to a new value without the need to use "Apply" panel. Vital signs undergoing change blink yellow.

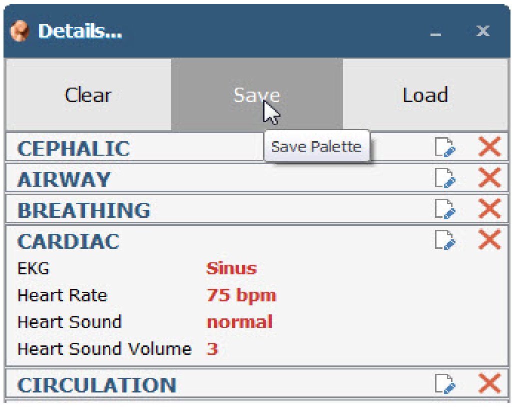

STATUS/DETAILS
CEPHALIC
Instant Apply

Eye State 15 blinks/min
Right: 5 / Left: 5
Pupil Reaction Right: On / Left: On
Pupil Dilation Time 0.5 sec
Cyanosis 0%

CREATING PALETTE ITEMS

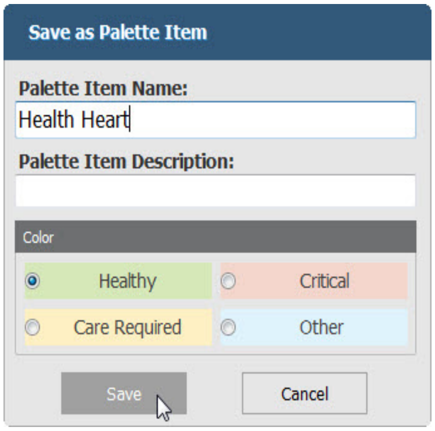
A palette item stores one or more vital sign settings into a single loadable object. Use a palette item to update a set of vital signs quickly. For example, one palette item can be created to update all the cardiac parameters to a healthy state.

To create a new palette item, set the values for the desired vital signs parameters using the details controls and click "Save".


Details...
Clear
Save
Load
Save Palette
CEPHALIC
AIRWAY
BREATHING
CARDIAC
CIRCULATION

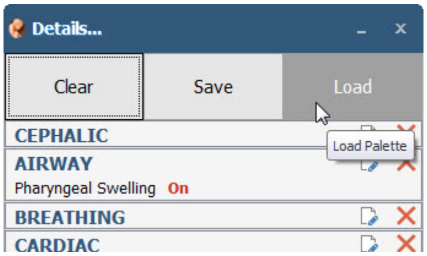
EKG Sinus
Heart Rate 75 bpm
Heart Sound normal
Heart Sound Volume 3

Enter a name for the palette, a description, and choose color code. Click "Save" to create the new palette Item. Palette items are stored in the active profile.


Save as Palette Item
Color
Healthy
Critical
Care Required
Other
Save
Cancel

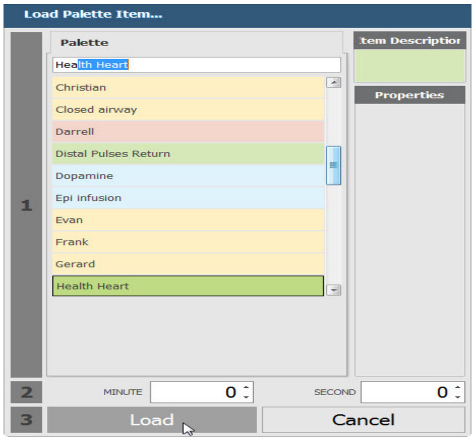
Palette Item Name: Health Heart
Palette Item Description:
Color: ● Healthy

When the palette is needed, click the Load button to select the palette from the library.

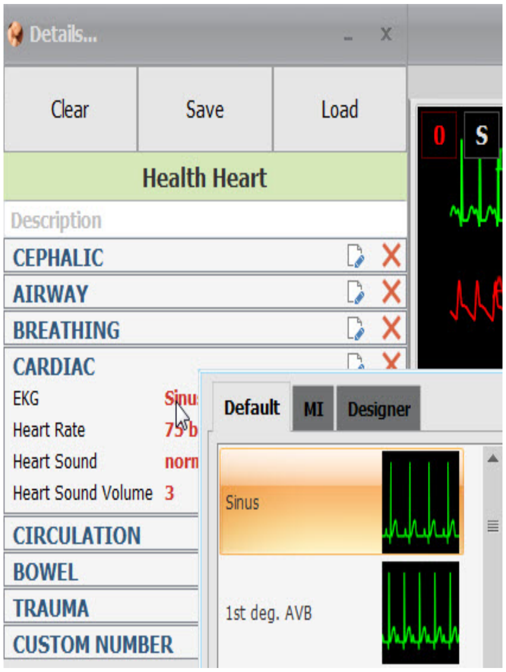

Details...
Clear
Save
Load
Load Palette
CEPHALIC
AIRWAY
BREATHING
CARDIAC

Pharyngeal Swelling On

Select the palette item from the "Load Palette Item" menu and click "Load"

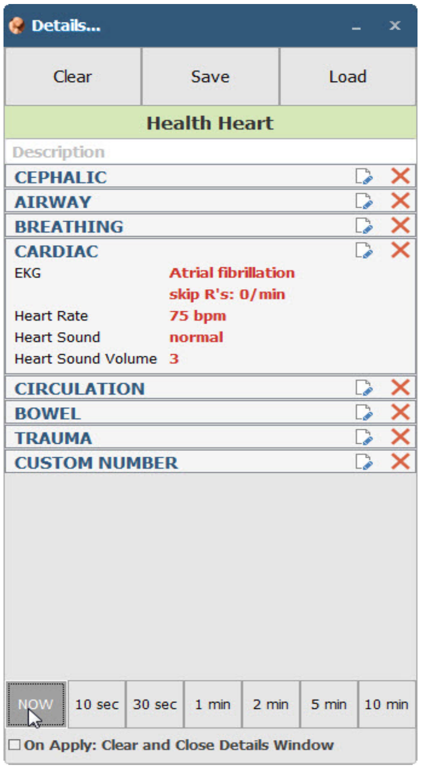

Load Palette Item...
Palette
Health Heart
Christian
Closed airway
Darrell
Distal Pulses Return
Dopamine
Epi infusion
Evan
Frank
Gerard
Health Heart
tem Description
Properties
1
2
MINUTE
0
SECOND
0
3
Load
Cancel

Make changes by clicking on the specific parameter


Details...
Clear
Save
Load
Health Heart
Description
CEPHALIC
AIRWAY
BREATHING
CARDIAC
CIRCULATION
BOWEL
TRAUMA
CUSTOM NUMBER
Default
MI
Designer
Sinus
1st deg. AVB
0
S

EKG Sinu
Heart Rate 75 b
Heart Sound norn
Heart Sound Volume 3

Click the apply option to submit the changes.

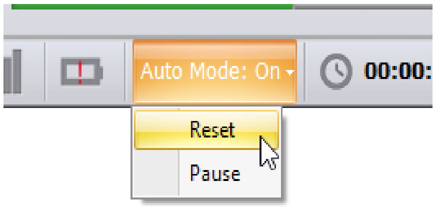

Details...
Clear
Save
Load
Health Heart
Description
CEPHALIC
AIRWAY
BREATHING
CARDIAC
CIRCULATION
BOWEL
TRAUMA
CUSTOM NUMBER
NOW
10 sec
30 sec
1 min
2 min
5 min
10 min
☐ On Apply: Clear and Close Details Window

EKG: Atrial fibrillation, skip R's: 0/min
Heart Rate: 75 bpm
Heart Sound: normal
Heart Sound Volume: 3

AUTOMATIC MODE CONTROLS

While operating in the Automatic Mode, UNI adjusts the patient's vital signs automatically in response to caregiver participation, instructor input, and pharmacologic intervention. For example, if the heart rate is increased, UNI will calculate a realistic response to the event and adjust the blood pressure values automatically. To enable the Automatic Mode as an option in the profiles menu, go to page 57.

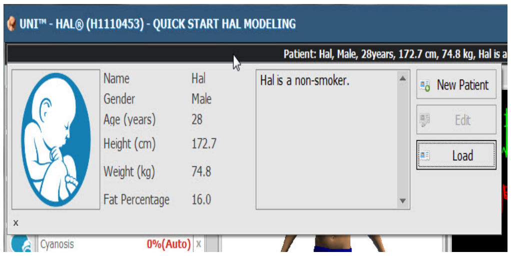
Click "Auto Mode" to pause the automatic changes. To return the patient to the initial state, click "Reset".


Auto Mode: On
00:00:
Reset
Pause

PATIENT PROFILE

Patient files store general information such as weight, height, and age. The automatic mode factors the patient's weight as it adjusts related physiological parameters. UNI includes several preprogrammed patients in the Quick Start Modeling profile.

A default patient is loaded when the Quick Start Modeling Profile is selected and it is an ideal candidate for most simulations. Click the patient information bar to view the patient's profile.


UNI™ - HAL® (H1110453) - QUICK START HAL MODELING
New Patient
Edit
Load

Patient: Hal, Male, 28years, 172.7 cm, 74.8 kg, Hal is a

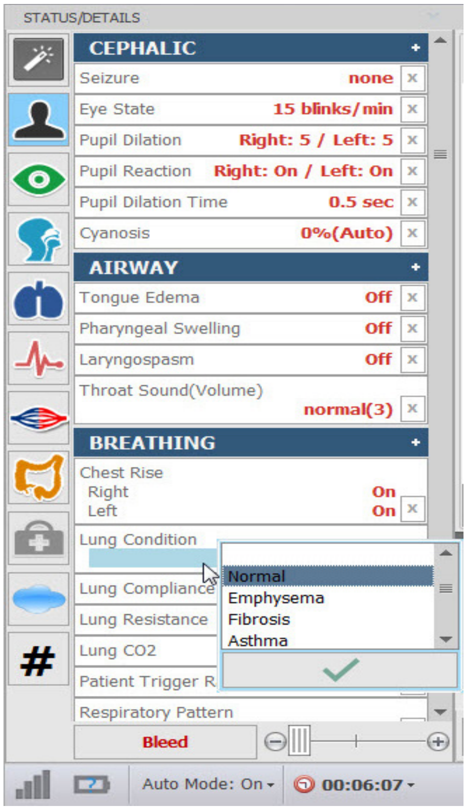
Name	Hal
Gender	Male
Age (years)	28
Height (cm)	172.7
Weight (kg)	74.8
Fat Percentage	16.0

Hal is a non-smoker.

Cyanosis 0%(Auto)

CONTROLS

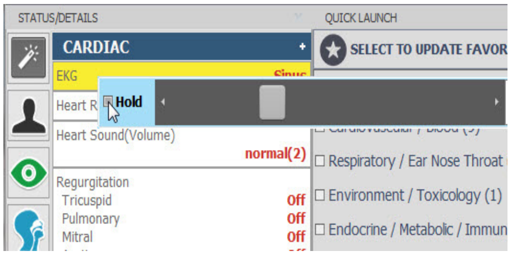
In the automatic mode, the Details panel includes additional vital sign parameters and control options not available in the Manual mode.


STATUS/DETAILS
CEPHALIC
AIRWAY
BREATHING
Normal
Emphysema
Fibrosis
Asthma
Bleed
Auto Mode: On
00:06:07

Seizure	none
Eye State	15 blinks/min
Pupil Dilation	Right: 5 / Left: 5
Pupil Reaction	Right: On / Left: On
Pupil Dilation Time	0.5 sec
Cyanosis	0%(Auto)
Tongue Edema	Off
Pharyngeal Swelling	Off
Laryngospasm	Off
Throat Sound(Volume)	normal(3)
Chest Rise Right	On
Chest Rise Left	On
Lung Condition	
Lung Compliance	
Lung Resistance	
Lung CO2	
Patient Trigger R	
Respiratory Pattern	

The "Hold" and "Auto" options are unique to the automatic mode. The "Auto Mode" adjusts vital sign controls with an (auto) suffix automatically.

Checkmark "Hold" to prevent the Auto Mode from adjusting the value. Then change the vital sign to the new static value. The automatic mode will not change values set to hold. The "Auto Mode" will adjust all other controls set to "auto".

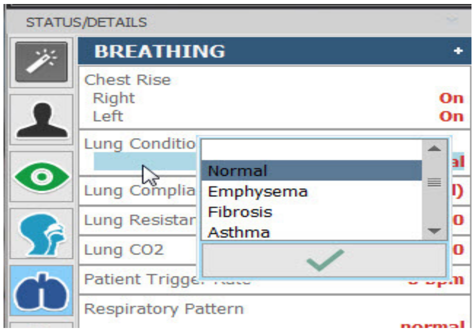

STATUS/DETAILS
QUICK LAUNCH
CARDIAC
SELECT TO UPDATE FAVOR
Hold
Respiratory / Ear Nose Throat
Environment / Toxicology (1)
Endocrine / Metabolic / Immun

EKG
Heart R
Heart Sound(Volume) normal(2)
Regurgitation
Tricuspid Off
Pulmonary Off
Mitral Off

Some changes are gradual and even if submitted for immediate change. The delay results from using a closed loop model that adjusts to the target values over time, rather than displaying a unique value that is unrelated to other parameters.

LUNG CONDITION

The lung condition parameter adjusts the shunt flow, dead space, airway resistance, and respiratory pattern automatically.

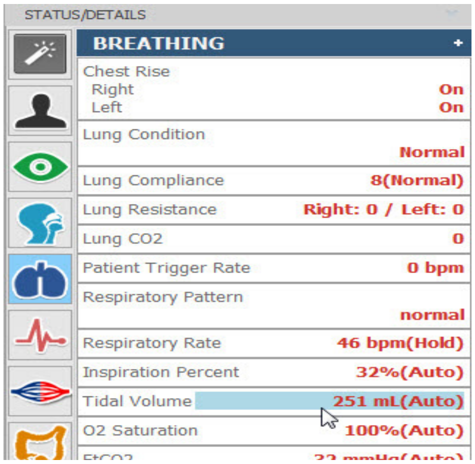

STATUS/DETAILS
BREATHING
Normal
Emphysema
Fibrosis
Asthma

Chest Rise
Right On
Left On
Lung Condition
Lung Compliance
Lung Resistance
Lung CO2
Patient Trigger Rate
Respiratory Pattern

TIDAL VOLUME

In the automatic mode, a tidal volume of 450 m/L to 500 m/L is considered the normal level for an adult of average build.

The "auto mode" does not restore the respiratory rate if it is set to zero. Always remember to specify a new respiratory rate.


STATUS/DETAILS
BREATHING

Chest Rise
Right On
Left On
Lung Condition Normal
Lung Compliance 8(Normal)
Lung Resistance Right: 0 / Left: 0
Lung CO2 0
Patient Trigger Rate 0 bpm
Respiratory Pattern normal
Respiratory Rate 46 bpm(Hold)
Inspiration Percent 32%(Auto)
Tidal Volume 251 mL(Auto)
O2 Saturation 100%(Auto)

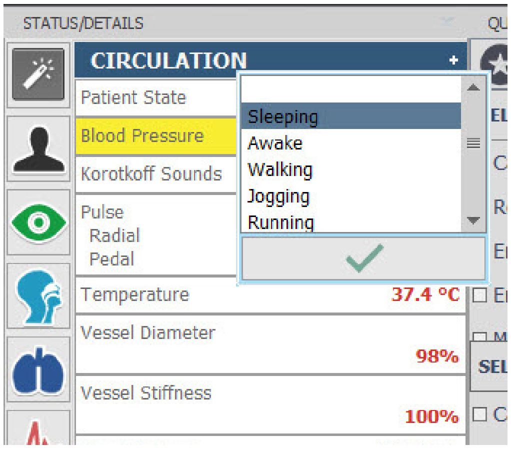
CIRCULATION

Each cardiac rhythm has a specific effect on the blood pressure waveforms. The pressure waveforms include ABP, CVP, PAWP, and Pulse. The blood pressure values are affected when any of the following parameters are changed:

- Vascular profiles: vessel diameter and vessel stiffness
- Heart Rate
- LV Contractility
- Total Blood Volume

PATIENT STATE

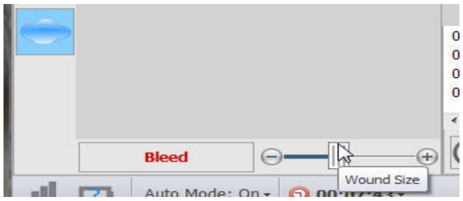
Set the patient status to "Excited" (after exercise) to increase heart rate, temperature, respiratory rate, tidal volume, O2, CO2 diffusion capacity, metabolic rate, and CO2 formation rate. Set the status to "resting" for a normal state.


STATUS/DETAILS
CIRCULATION
Sleeping
Awake
Walking
Jogging
Running

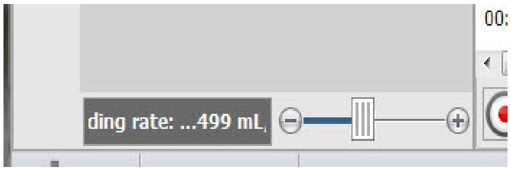
Patient State
Blood Pressure
Korotkoff Sounds
Pulse
Radial
Pedal
Temperature 37.4 °C
Vessel Diameter 98%
Vessel Stiffness 100%

BLEED AND WOUND SIZE

The Bleed and Wound size options simulate blood loss virtually. To start the virtual bleeding click the “Bleed” button, and then adjust the bleeding rate using the “Wound Size” control.

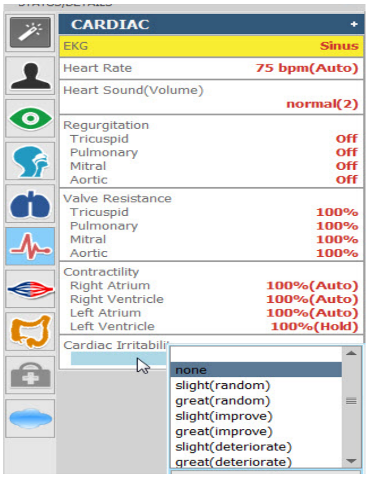

Bleed
Wound Size
Auto Mode: On

Once the bleeding function is activated, the Auto Mode will adjust the vital signs in response to the blood loss. If the provider does not intervene, the vital signs will deteriorate and myocardial ischemia will occur. For information on how to infuse blood to the model virtually, go to page 39.


ding rate: ...499 mL

CARDIAC

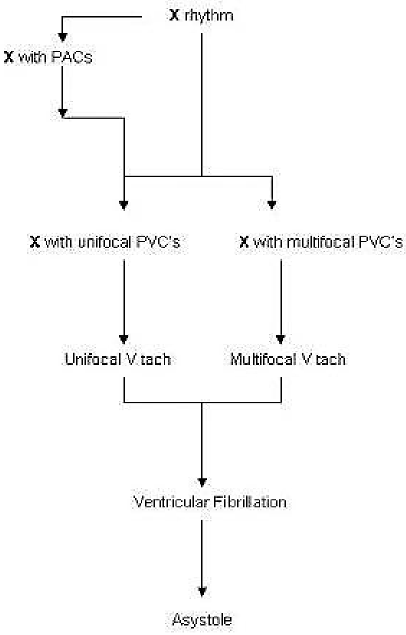
The Cardiac irritability control adjusts the cardiac rhythms indirectly. Set the Cardiac Irritability to “improve” to move the current heart rhythm to normal sinus gradually. Alternatively, set the cardiac irritability to “deteriorate” to move the heart rhythm to ventricular fibrillation and eventually asystole.



CARDIAC
EKG Sinus
Heart Rate 75 bpm(Auto)
Heart Sound(Volume) normal(2)
Regurgitation
Tricuspid Off
Pulmonary Off
Mitral Off
Aortic Off
Valve Resistance
Tricuspid 100%
Pulmonary 100%
Mitral 100%
Aortic 100%
Contractility
Right Atrium 100%(Auto)
Right Ventricle 100%(Auto)
Left Atrium 100%(Auto)
Left Ventricle 100%(Hold)
Cardiac Irritabili

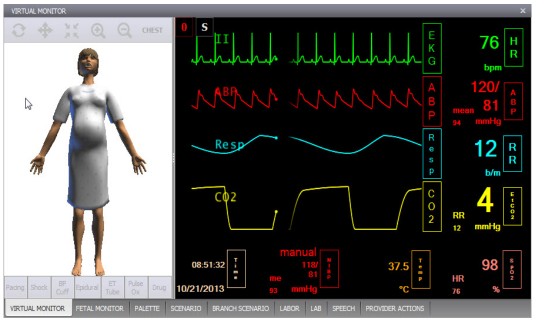
none
slight(random)
great(random)
slight(improve)
great(improve)
slight(deteriorate)
great(deteriorate)

The progression of rhythms generally follows the pattern displayed in the figure below, where “X” represents normal sinus rhythm, multifocal atrial tachycardia, atrial flutter, atrial fibrillation, junctional rhythm, left or right bundle branch block, or atrio-ventricular block:


X rhythm
X with PACs
X with unifocal PVC's
X with multifocal PVC's
Unifocal V tach
Multifocal V tach
Ventricular Fibrillation
Asystole

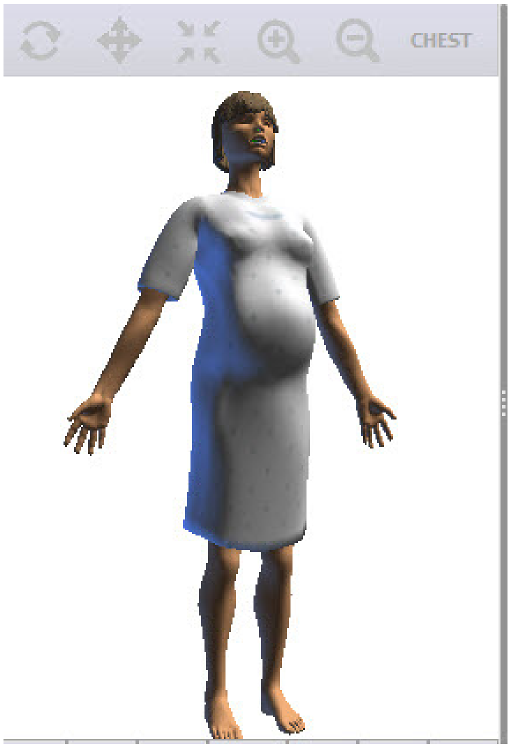
Virtual monitor

The interactive virtual monitor tab (VM) displays the patient’s vital signs information in real time and 3D-Body view. The waveform and numerical parameters are interactive, and the layout is fully customizable. If the VM tab is not displayed by default, go to Menu section to activate the virtual monitor add-on.

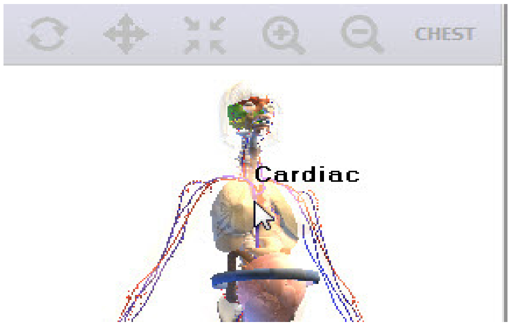

VIRTUAL MONITOR
CHEST
II
ABP
Resp
CO2
EKG
HR
76
bpm
120/
81
mean
mmHg
12
RR
b/m
4
mmHg
08:51:32
10/21/2013
manual
118/
81
37.5
°C
98
%
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS

BODY VIEW

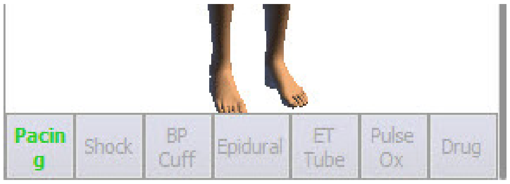
The “Body View” mode displays an interactive model of the simulator. The model is a representation of the simulator and its internal organs.



Use the Body View controls on the top to rotate, move, re-center, and zoom the model. Place the cursor over the body to view the model's internal organs. Also, reach the desired category in the list view clicking over the body view.


CHEST
Cardiac

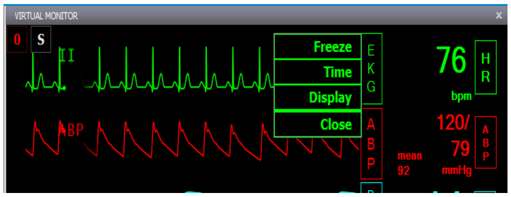
The body view includes the sensor panel, which detects the action performed and shows active sensors highlighted in green


Pacing
Shock
BP Cuff
Epidural
ET Tube
Pulse Ox
Drug

The Body View inside the Virtual Monitors window is available for all simulators except the Code Blue III Family, the 12 LEAD ECG simulator, and the Dynamic Lung Compliance simulator. Also this view will be disabled when using the Micro+/Pro+ recording and debriefing system.

WAVEFORM MENU

Click on the waveform name to access the options or change the waveform type.

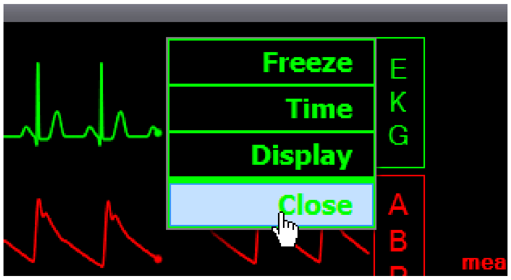

VIRTUAL MONITOR
0
S
II
Freeze
Time
Display
Close
EKG
ABP
76
HR
bpm
120/
79
mean
92
mmHg
ABP

- Freeze- Click freeze to pause a waveform reading. To unfreeze the selection, click the waveform menu and select Go.
- Time- Click on the time option to change the length of the ECG waveform. The options available are 5 seconds, 10 seconds, 15 seconds and 20 seconds.
- Display- Click on the display menu to edit the wave form color, amplitude, intensity and scroll direction.

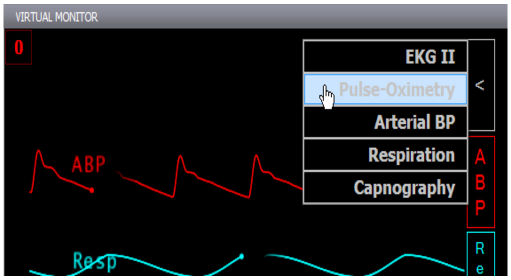
CHANGING THE WAVEFORM TYPE

The types of available waveforms are Pulse-Oximetry, Arterial BP, and Respiration.

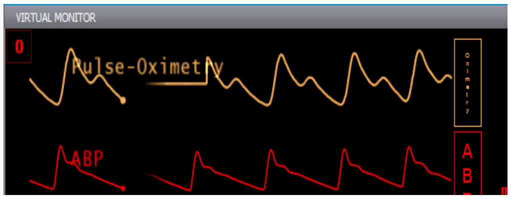
1. To change which waveform is displayed on the ECG graph, begin by clicking the ECG icon then selecting "close".


Freeze
Time
Display
Close
EKG
AB
mea

2. Click the waveform menu box and choose either the type of wave to be displayed or the ECG lead.

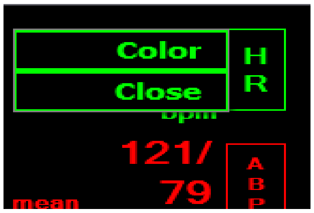

VIRTUAL MONITOR
0
EKG II
Pulse-Oximetry
Arterial BP
Respiration
Capnography
ABP
Resp

3. The new lead information is now displayed.

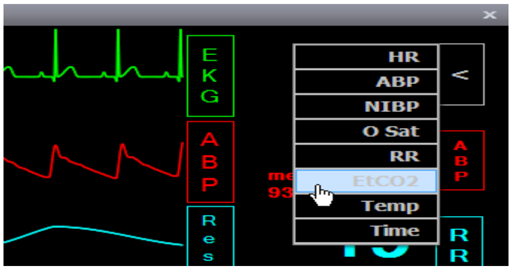

VIRTUAL MONITOR
0
Pulse-Oximetry
ABP

NUMERIC MENU

Click the numeric menu to access the numerical parameter options. To change the type of numerical parameter displayed, click the numeric menu and select “close”.

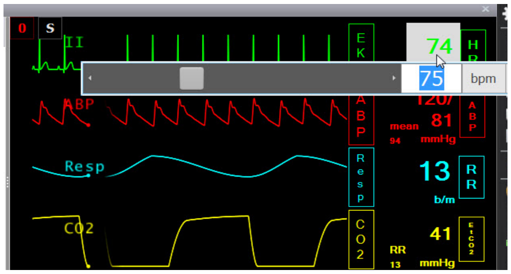

Color
Close
HR
121/
79
mean
ABP

Click the empty numerical menu and select the new parameter type.


EKG
ABP
Res
HR
ABP
NIBP
O Sat
RR
EtCO2
Temp
Time
RR

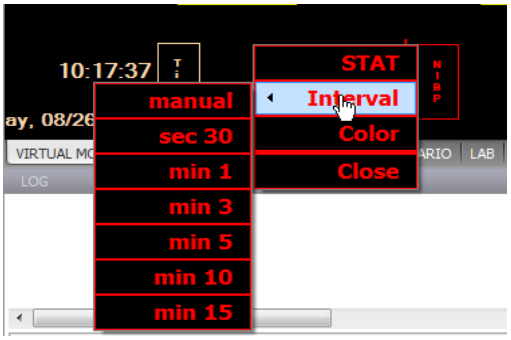
CHANGING VITAL SIGNS

Vital signs can be adjusted directly from the virtual monitor tab. First, Double click the vital sign parameter to access the floating control window. Then, adjust the parameter to the new value and submit the changes using the Apply NOW or trending option.


0
S
II
74
75
bpm
HR
ABP
120/
81
mean
mmHg
Resp
13
b/m
RR
CO2
41
mmHg
EtCO2

NONINVASIVE BLOOD PRESSURE

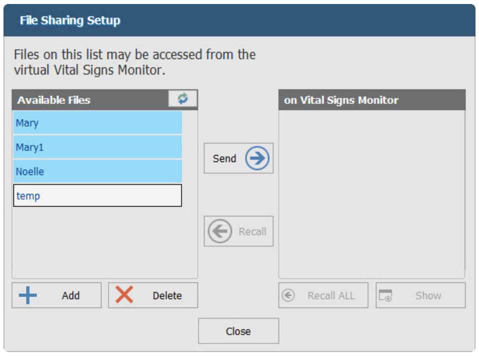
By default, the NIBP parameter does not update automatically. Click the NIBP menu and select “Stat” to refresh the reading. Alternatively, set a refresh interval to automate the stat process periodically.


10:17:37
STAT
Interval
Color
Close
NIBP
manual
sec 30
min 1
min 3
min 5
min 10
min 15
VIRTUAL MO
LOG
LAB

File Sharing

FILE SHARING

The file sharing menu allows the facilitator to send images, audio, and text files to the virtual monitor screen. Use the file sharing feature to fulfill file requests by the provider during simulation.

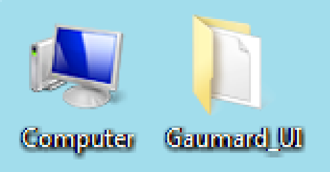

File Sharing Setup

Files on this list may be accessed from the virtual Vital Signs Monitor.

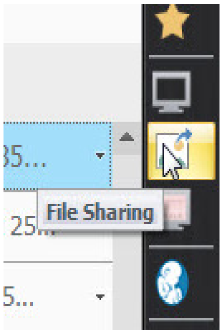
Available Files
Mary
Mary1
Noelle
temp

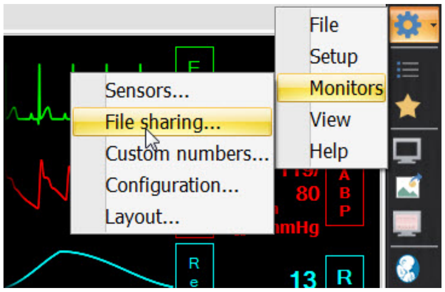
on Vital Signs Monitor
Send
Recall
Add
Delete
Recall ALL
Show
Close

The files used for sharing are stored in the control PC. Before the simulation begins, add mock image (.jpg, .bmp) or text files (.txt) into the Gaumard_UI folder located on the home screen of the control computer.

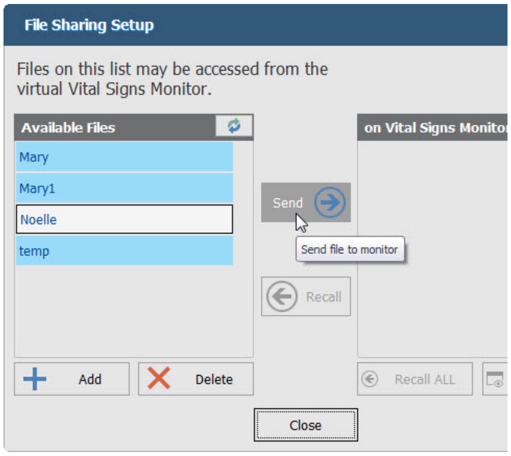

Computer
Gaumard_UI

Open the “File Sharing” control from the icon or from the Menu/Monitors/File Sharing


35...
File Sharing
25...
5...


File
Setup
Monitors
View
Help
Sensors...
File sharing...
Custom numbers...
Configuration...
Layout...
80
ABP
mmHg
13
R

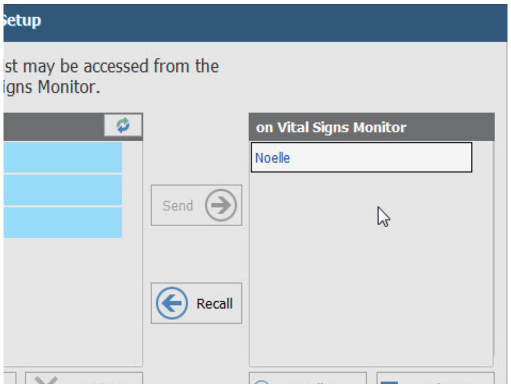
The list of files stored on the Gaumard_UI folder available for sharing is displayed on the left panel. To share a file, select the file from the left panel and click “Send”.


File Sharing Setup

Files on this list may be accessed from the virtual Vital Signs Monitor.

Available Files
Mary
Mary1
Noelle
temp
Send
Send file to monitor
Recall
on Vital Signs Monitor
Add
Delete
Recall ALL
Close

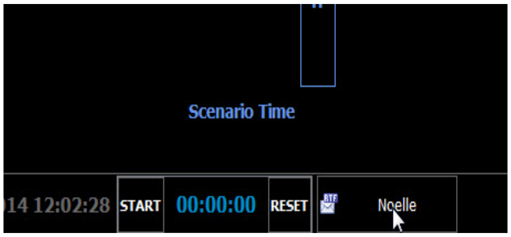
Files currently shared are listed on the “Virtal Signs Monitor” list.


etup

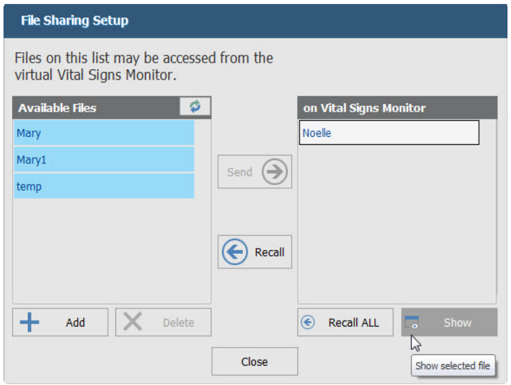
st may be accessed from the
igns Monitor.

on Vital Signs Monitor
Noelle
Send
Recall

The file name is displayed at the bottom left of the virtual monitor screen. The icon notifies the provider that a file is available for viewing. Click file name to open in.

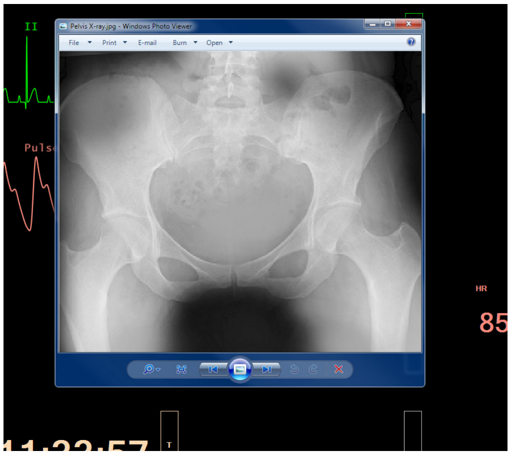

Scenario Time
14 12:02:28
START
00:00:00
RESET
Noelle

Also, the instructor can open the file from the UNI software.

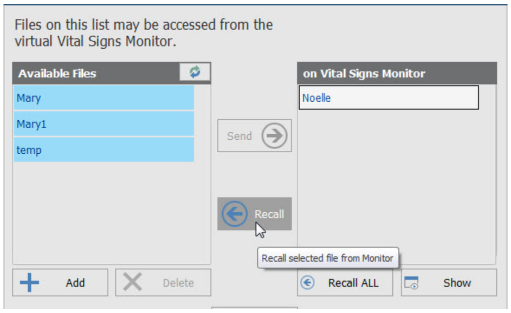

File Sharing Setup
Available Files
Mary
Mary1
temp
on Vital Signs Monitor
Noelle
Send
Recall
Add
Delete
Recall ALL
Show
Close
Show selected file

Files on this list may be accessed from the virtual Vital Signs Monitor.

The x-ray file is now open on the virtual monitor computer.


II
Pelvis X-ray.jpg - Windows Photo Viewer
File
Print
E-mail
Burn
Open
Puls
HR
85

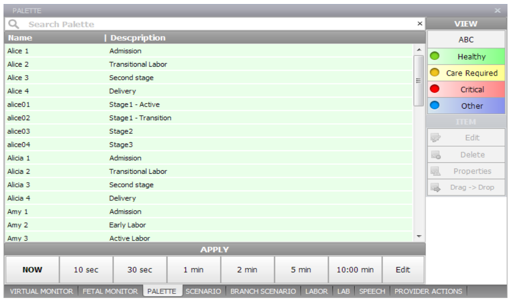
To discontinue sharing the file, select the file from the file sharing menu and click "Recall".


Available Files
Mary
Mary1
temp
on Vital Signs Monitor
Noelle
Send
Recall
Recall selected file from Monitor
Add
Delete
Recall ALL
Show

Files on this list may be accessed from the virtual Vital Signs Monitor.

Palettes

The Palette page appears identical in both the manual and automatic mode. Each item on the Palette represents a complete or partial physiological state. It displays all of the Palette Items in the active profile. Each profile has its own separately customized Palette. Recall that you can create Palette Items using the Details page.


PALETTE
Search Palette
VIEW
ABC
Healthy
Care Required
Critical
Other
ITEM
Edit
Delete
Properties
Drag -> Drop
APPLY
NOW
10 sec
30 sec
1 min
2 min
5 min
10:00 min
Edit
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS

Name	Descpription
Alice 1	Admission
Alice 2	Transitional Labor
Alice 3	Second stage
Alice 4	Delivery
alice01	Stage1 - Active
alice02	Stage1 - Transition
alice03	Stage2
alice04	Stage3
Alicia 1	Admission
Alicia 2	Transitional Labor
Alicia 3	Second stage
Alicia 4	Delivery
Amy 1	Admission
Amy 2	Early Labor
Amy 3	Active Labor

Apply Palette Items using the buttons at the bottom of the page, just as changes to Simulator's condition are applied on the Details list.

Editing existing Palette Items is simply a matter of selecting the item you wish to modify and clicking the Edit button. You will be taken automatically to the Details list, and the settings that comprise the selected Palette Item will be displayed. Change them as desired, and click the "Save as Palette Item" button.

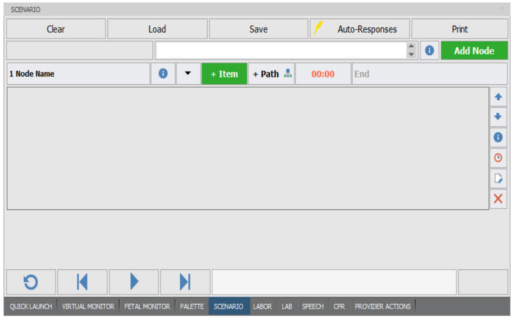
Many of the functions related to Palette Items are also available by clicking the second mouse button (usually the right button) while the pointer is positioned over an Item. Note, when using the tablet computer, this is best done by holding the stylus button while tapping the screen.

Scenarios

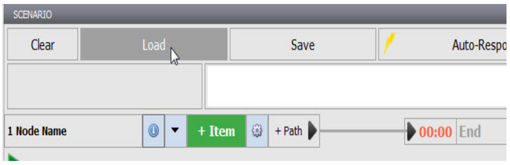
Scenarios automate the vital sign changes, responses, and software actions required to carry out a complete simulation exercise. UNI includes several preprogrammed scenario based simulation exercises in the "Quick Start Profile".

SCENARIO SCREEN

Use the panel buttons to clear, load, and save new scenarios.

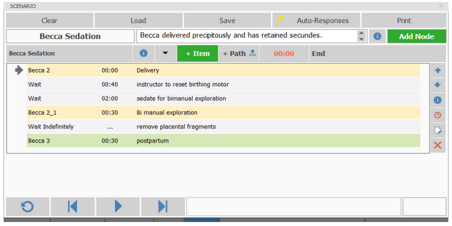

SCENARIO
Clear
Load
Save
Auto-Responses
Print
Add Node
1 Node Name
+ Item
+ Path
00:00
End
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS

To use a preprogrammed scenario go to the Scenario tab and click “Load Scenario”.


SCENARIO
Clear
Load
Save
Auto-Respo
1 Node Name
+ Item
+ Path
00:00
End

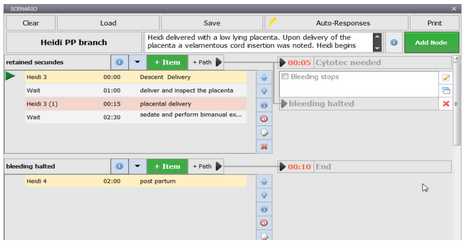
SCENARIO OVERVIEW

A scenario could be a playlist of vital signs palette items played back in succession or it can change in response to the participant’s actions.


SCENARIO
Clear
Load
Save
Auto-Responses
Print
Becca Sedation
Add Node
Becca Sedation
+ Item
+ Path
00:00
End

Becca delivered precipitously and has retained secundes.

Becca 2	00:00	Delivery
Wait	00:40	instructor to reset birthing motor
Wait	02:00	sedate for bimanual exploration
Becca 2_1	00:30	Bi manual exploration
Wait Indefinitely	...	remove placental fragments
Becca 3	00:30	postpartum

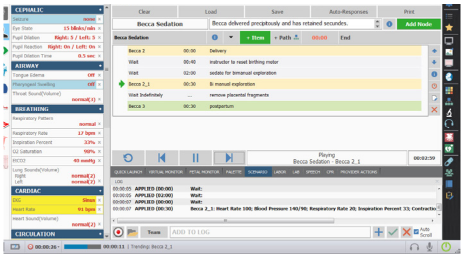

SCENARIO
Clear
Load
Save
Auto-Responses
Print
Heidi PP branch
Add Node
retained secundes
+ Item
+ Path
00:05
Cytotec needed
Bleeding stops
bleeding halted
bleeding halted
+ Item
+ Path
00:10
End

Heidi delivered with a low lying placenta. Upon delivery of the placenta a velamentous cord insertion was noted. Heidi begins

Heidi 3	00:00	Descent Delivery
Wait	01:00	deliver and inspect the placenta
Heidi 3 (1)	00:15	placental delivery
Wait	02:30	sedate and perform bimanual ex...

Heidi 4	02:00	post partum

During the scenario, each vital signs palette updates the patient’s vital signs. The palette’s transition time trends the increase or decrease of numerical parameters (e.g. Heart rate, blood pressure) over seconds or minutes. In the figure below for example, the vital signs palette “Becca 2_1” is programmed with a transition time of 30 seconds. When the scenario reaches this palette, it will take 30 seconds for the vital signs to trend from the previous state to the values programmed within the palette.


CEPHALIC
AIRWAY
BREATHING
CARDIAC
CIRCULATION
Clear
Load
Save
Auto-Responses
Print
Becca Sedation
Add Node
Becca Sedation
+ Item
+ Path
00:00
End
Playing
Becca Sedation - Becca 2_1
00:02:59
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS
LOG
Team
ADD TO LOG
Auto Scroll
00:00:26
00:00:11 | Trending: Becca 2_1

Seizure	none
Eye State	15 blinks/min
Pupil Dilation	Right: 5 / Left: 5
Pupil Reaction	Right: On / Left: On
Pupil Dilation Time	0.5 sec
Tongue Edema	Off
Pharyngeal Swelling	Off
Throat Sound(Volume)	normal(3)
Respiratory Pattern	normal
Respiratory Rate	17 bpm
Inspiration Percent	33%
O2 Saturation	98%
EtCO2	40 mmHg
Lung Sounds(Volume) Right Left	normal(2) normal(2)
EKG	Sinus
Heart Rate	91 bpm
Heart Sound(Volume)	normal(2)

Becca delivered precipitously and has retained secundes.

Becca 2	00:00	Delivery
Wait	00:40	instructor to reset birthing motor
Wait	02:00	sedate for bimanual exploration
Becca 2_1	00:30	Bi manual exploration
Wait Indefinitely	...	remove placental fragments
Becca 3	00:30	postpartum

```
00:00:05  APPLIED (00:00)   Wait:
00:00:05  APPLIED (02:00)   Wait:
00:00:07  APPLIED (00:00)   Wait:
00:00:07  APPLIED (00:30)   Becca 2_1: Heart Rate 100; Blood Pressure 140/90; Respiratory Rate 20; Inspiration Percent 33; Contractio
```

Wait palettes do not update or change vital signs. Instead, wait palettes give the participant time to perform an action; this may be treatment in response to a complication or performing a standard assessment.

SCENARIO CONTROLS

Scenarios are controlled from the buttons at the bottom of the tab. The scenario plays palette items in much the same way a music player plays songs. Intuitively, the facilitator can play, stop, pause, skip, or repeat items as appropriate.

The Scenario Position Indicator points to the current item and shows the current status of the scenario. The following paragraphs describe in detail the behavior of each button and indicator.

SCENARIO POSITION INDICATOR

▷ An unfilled triangle means that the scenario is stopped. When the Play button is clicked, the item being pointed by the indicator is played.

▶ A rapidly blinking triangle means that the scenario is playing the item to which the indicator is pointing.

▶ A slowly blinking triangle means that the scenario is paused at the item to which the indicator is pointing.

SCENARIO PLAYER CONTROLS

▶ Plays the item to which the scenario position indicator is pointing. This button has two states: play or pause.

⏸ Pauses the scenario. This state of the play button is only active when the scenario is playing. It is disabled when a ‘Wait indefinitely’ item is playing because in such cases the scenario is already paused.

The Stop button has two behaviors depending on when it is clicked. When clicked once, the Stop button halts the scenario at the end of the item currently playing. When clicked a second time, the scenario is stopped immediately. For example, if the item currently playing has a transition of 1:00 minute and the Stop button is pressed when it has 0:10 seconds left, the scenario will be halted at the end of the transition (i.e., in 10 seconds). If the Stop button is clicked again within those remaining 10 seconds, the scenario stops immediately.

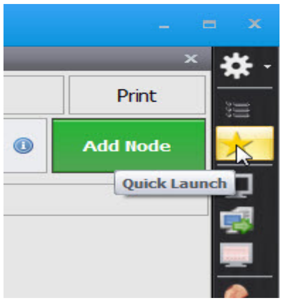
The Next button advances the indicator to the next item on the scenario regardless if the scenario is playing, paused, or stopped. It can also be used to move the indicator to select an item before playing it.

Similar to the Next button, the Previous button returns the indicator to the previous item in the scenario.

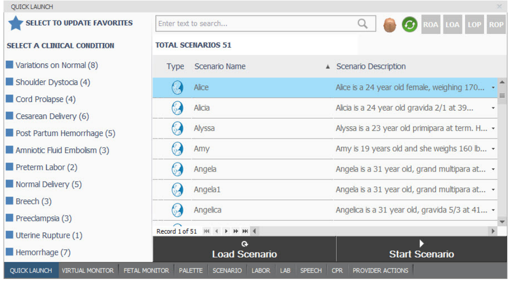
The Reset button stops the scenario immediately and returns the indicator to the first item in the scenario.

SCENARIO QUICK LAUNCH

Use the scenario Quick Launch tab to start a scenario with a single click.



The Quick Launch tab displays all of the scenarios saved in the active profile, for more information refer to the “Quick Launch” section.


QUICK LAUNCH

SELECT TO UPDATE FAVORITES

Enter text to search...

ROA LOA LOP ROP

SELECT A CLINICAL CONDITION

- Variations on Normal (8)
- Shoulder Dystocia (4)
- Cord Prolapse (4)
- Cesarean Delivery (6)
- Post Partum Hemorrhage (5)
- Amniotic Fluid Embolism (3)
- Preterm Labor (2)
- Normal Delivery (5)
- Breech (3)
- Preeclampsia (3)
- Uterine Rupture (1)
- Hemorrhage (7)

TOTAL SCENARIOS 51

Type	Scenario Name	Scenario Description
	Alice	Alice is a 24 year old female, weighing 170...
	Alicia	Alicia is a 24 year old gravida 2/1 at 39...
	Alyssa	Alyssa is a 23 year old primipara at term. H...
	Amy	Amy is 19 years old and she weighs 160 lb...
	Angela	Angela is a 31 year old, grand multipara at...
	Angela1	Angela is a 31 year old, grand multipara at...
	Angelica	Angelica is a 31 year old, gravida 5/3 at 41...

Record 1 of 51

Load Scenario | Start Scenario

QUICK LAUNCH | VIRTUAL MONITOR | FETAL MONITOR | PALETTE | SCENARIO | LABOR | LAB | SPEECH | CPR | PROVIDER ACTIONS

CREATING A NEW SCENARIO

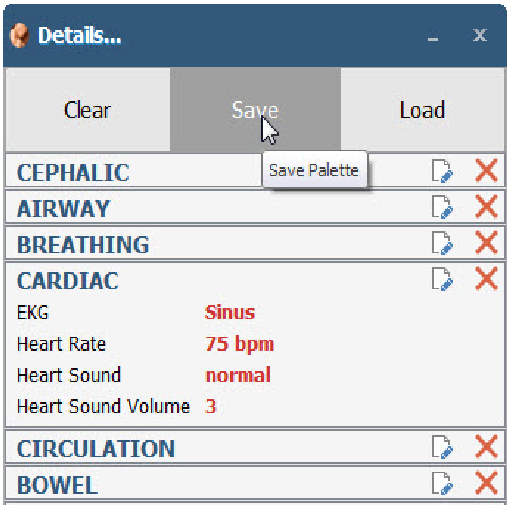
The general process of creating a new scenario is the following:

- Create a vital sign palette item for each state in the scenario
- Add nodes
- Add palettes to each node
- Add paths to nodes that require provider action
- Create key events to alter the progress and trajectory of the nodes within the scenario
- Add the vital signs palettes and wait times to the scenario
- Play the scenario
- Modify and edit palettes
- Save the scenario

CREATING PALETTE ITEMS

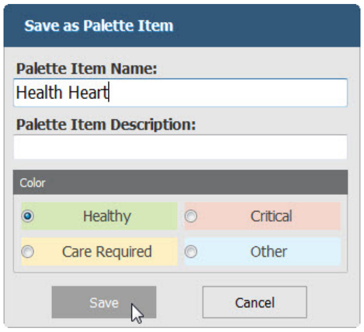
1. First, create the palette items that you will use in your scenario. Use the Status/Details to change the controls that best describe the condition you are trying to simulate. Not every

field has to be populated in order to save a palette item.


Details...
Clear
Save
Load
Save Palette
CEPHALIC
AIRWAY
BREATHING
CARDIAC
CIRCULATION
BOWEL

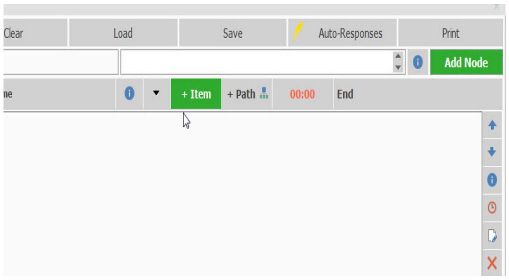
EKG Sinus
Heart Rate 75 bpm
Heart Sound normal
Heart Sound Volume 3

2. Save your palette(s) by clicking on the "Save Palette" button on the upper right side of the page. The "Save As Palette Item" dialog box is now displayed. Assign a name to the Palette Item and specify a brief description. Also, select a color that represents the palette's condition: green for healthy, red for critical, yellow for care required, and blue for other. Click Save.

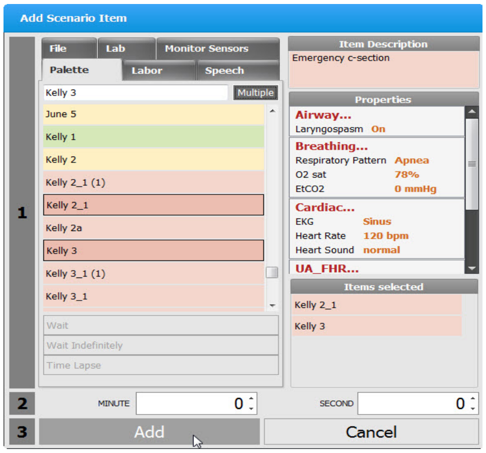

Save as Palette Item
Color
Save
Cancel

Palette Item Name: Health Heart
Palette Item Description:
● Healthy ○ Critical
○ Care Required ○ Other

3. After creating all the palettes, go to the Scenario tab and click on the "Add Item" button.


Clear
Load
Save
Auto-Responses
Print
Add Node
+ Item
+ Path
00:00
End

4. Select a single palette or enable Multi to select multiple palettes at the same time. Specify a transition time for the palette and click "Add".


Add Scenario Item
File
Lab
Monitor Sensors
Palette
Labor
Speech
Multiple
Item Description
Properties
Items selected
1
2
3
Wait
Wait Indefinitely
Time Lapse
MINUTE
SECOND
Add
Cancel

Kelly 3
June 5
Kelly 1
Kelly 2
Kelly 2_1 (1)
Kelly 2_1
Kelly 2a
Kelly 3
Kelly 3_1 (1)
Kelly 3_1

Item Description: Emergency c-section

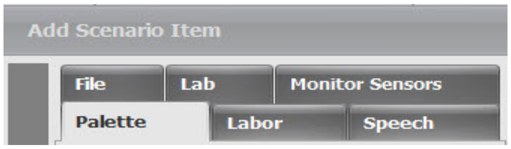
Airway...
Laryngospasm On
Breathing...
Respiratory Pattern Apnea
O2 sat 78%
EtCO2 0 mmHg
Cardiac...
EKG Sinus
Heart Rate 120 bpm
Heart Sound normal
UA_FHR...

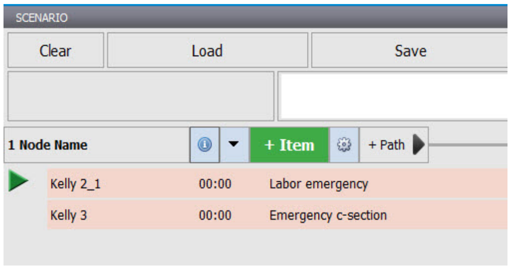
Items selected: Kelly 2_1, Kelly 3

MINUTE 0 SECOND 0

Notice that the palette properties are shown in the right column below the item description when a specific palette is selected.

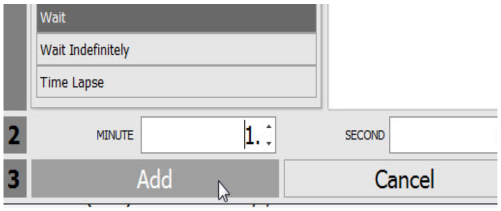
5. Repeat step 4 to add more palettes, labor scenarios, wait times, speech, monitor sensors, files, and labs.


Add Scenario Item
File
Lab
Monitor Sensors
Palette
Labor
Speech


SCENARIO
Clear
Load
Save
+ Item
+ Path

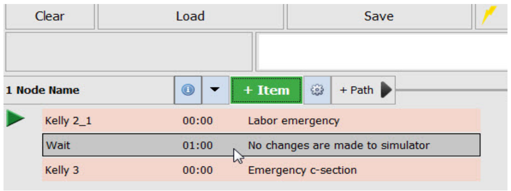
1 Node Name		
Kelly 2_1	00:00	Labor emergency
Kelly 3	00:00	Emergency c-section

6. A "Wait" item maintains vital signs values steady for the transition time allotted. Insert a "wait" item to give the provider time to perform an action or an assessment. For example, auscultating blood pressure or gathering general information about the patient. Alternatively, add "Wait Indefinitely" to hold the vital signs until the "next item" button is clicked from the playback controls.


Wait
Wait Indefinitely
Time Lapse
2
3
SECOND
Add
Cancel

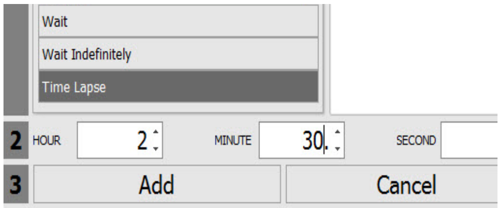
MINUTE 1.

7. The wait palette item is now added.


Clear
Load
Save
1 Node Name
+ Item
+ Path

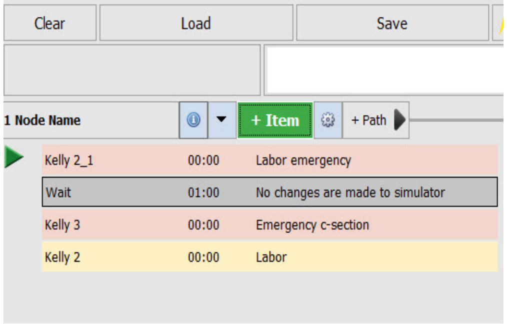
Kelly 2_1	00:00	Labor emergency
Wait	01:00	No changes are made to simulator
Kelly 3	00:00	Emergency c-section

8. Also add "Time Lapse" to set a real time for the scenario. For example, applying a medication might take 2 and half hours to have the effect on the patient. So by adding this time lapse the real time can be reflected in the scenario, but it will happen in 10 seconds


Wait
Wait Indefinitely
Time Lapse
2
3
SECOND
Add
Cancel

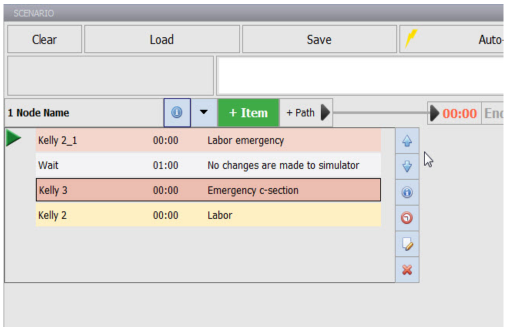
HOUR 2 MINUTE 30

9. Add more palette items.


Clear
Load
Save
1 Node Name
+ Item
+ Path

Kelly 2_1	00:00	Labor emergency
Wait	01:00	No changes are made to simulator
Kelly 3	00:00	Emergency c-section
Kelly 2	00:00	Labor

10. Use the "Edit Item" menu shown below to move up and down the items, access the properties of each palette, edit the transition time, edit and delete the palettes.


SCENARIO
Clear
Load
Save
Auto
1 Node Name
+ Item
+ Path
00:00

Kelly 2_1	00:00	Labor emergency
Wait	01:00	No changes are made to simulator
Kelly 3	00:00	Emergency c-section
Kelly 2	00:00	Labor

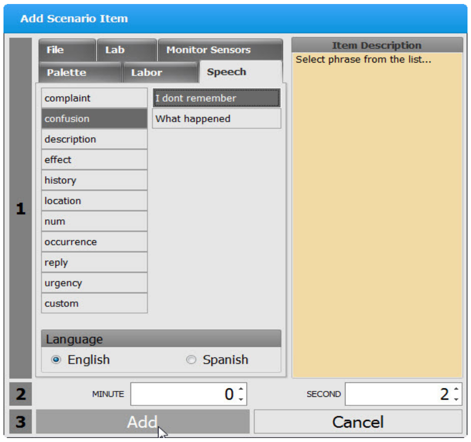
ADDITIONAL SCENARIO FEATURES

Incorporate the following features into a scenario for added realism.

- Auto responses – move onto the next palette item automatically when virtual electric therapy is detected
- File sharing lab reports, and monitor sensors – Send files and lab reports to the virtual monitor computer, and enable monitor sensors
- Labor – add labor scenarios
- Speech – add phrases or custom speech

SPEECH

Add realism to a scenario by integrating automated speech phrases. Click the Add to scenario button and select Speech. Then, select the type of speech and phrase using the menu.

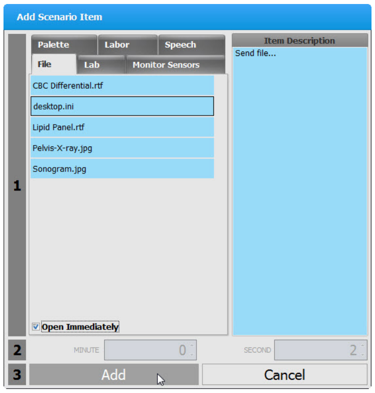

Add Scenario Item
File
Lab
Monitor Sensors
Palette
Labor
Speech
Item Description
Select phrase from the list...
complaint
confusion
description
effect
history
location
num
occurrence
reply
urgency
custom
I dont remember
What happened
1
Language
English
Spanish
2
MINUTE
SECOND
3
Add
Cancel

Language: ● English ○ Spanish

MINUTE 0 SECOND 2

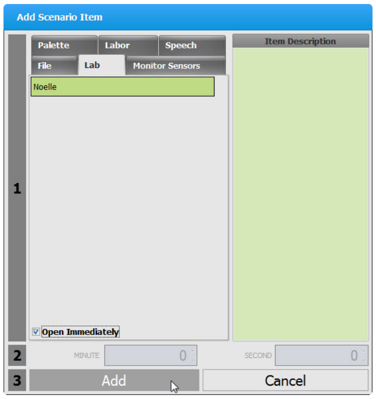
FILE SHARING, LAB REPORTS, AND MONITOR SENSORS

The scenario can also automate the distribution of shared files, labs and monitor sensors. Click "Add to scenario", and then use the "File", "Lab" ,and "Monitor Sensors" tabs to select from available documents and sensors. For more information making files available refer "File Sharing" section. To create a new lab report, refer to "Lab" sections.

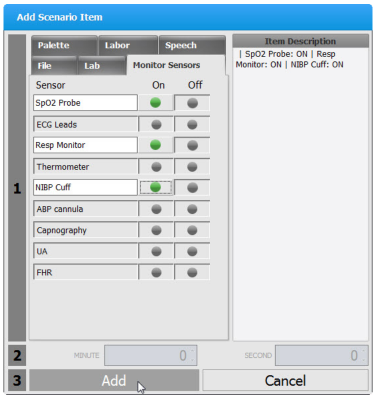

Add Scenario Item
Palette
Labor
Speech
File
Lab
Monitor Sensors
Item Description
Send file...
CBC Differential.rtf
desktop.ini
Lipid Panel.rtf
Pelvis-X-ray.jpg
Sonogram.jpg
1
2
MINUTE
SECOND
3
Add
Cancel

☑ Open Immediately

MINUTE 0 SECOND 2


Add Scenario Item
Palette
Labor
Speech
File
Lab
Monitor Sensors
Noelle
Item Description
1
☑ Open Immediately
2
MINUTE
0
SECOND
0
3
Add
Cancel

Select the sensors to be “ON” for the scenario


Add Scenario Item
Palette
Labor
Speech
File
Lab
Monitor Sensors
Item Description
1
2
MINUTE
0
SECOND
0
3
Add
Cancel

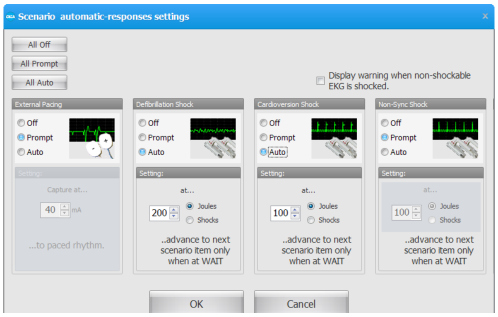
Sensor	On	Off
SpO2 Probe	●	
ECG Leads		●
Resp Monitor	●	
Thermometer		●
NIBP Cuff	●	
ABP cannula		●
Capnography		●
UA		●
FHR		●

| SpO2 Probe: ON | Resp Monitor: ON | NIBP Cuff: ON

AUTO RESPONSES

The scenario auto-response settings move the scenario to the next palette when electrical therapy is detected. Electrical therapy can be applied by the facilitator via Virtual Shock panel or by the care provider using real medical equipment if the simulator supports it.

> **Auto-responses advance to the next palette if the virtual shock is applied while a “wait indefinitely” palette is playing and the heart rhythm is “shockable”.**


Scenario automatic-responses settings
All Off
All Prompt
All Auto
☐ Display warning when non-shockable EKG is shocked.
External Pacing
Off
Prompt
Auto
Setting:
Capture at...
40
mA
...to paced rhythm.
Defibrillation Shock
Off
Prompt
Auto
Setting:
at...
200
Joules
Shocks
..advance to next scenario item only when at WAIT
Cardioversion Shock
Off
Prompt
Auto
Setting:
at...
100
Joules
Shocks
..advance to next scenario item only when at WAIT
Non-Sync Shock
Off
Prompt
Auto
Setting:
at...
100
Joules
Shocks
..advance to next scenario item only when at WAIT
OK
Cancel

The three response options are defined below:

- Off - The scenario does not respond to the electric therapy.
- Prompt - The software detects the electrical therapy and prompts the user for approval before advancing to the next palette.
- Auto – Advances to the next palette automatically only if the electrical therapy meets the threshold specified.

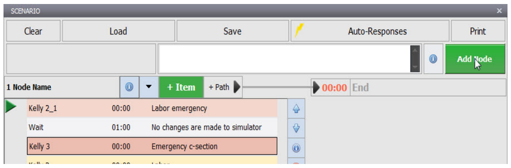
Notice that by this point, a lineal scenario is created by adding items to a single node.

To create a branched scenario with multiple nodes and paths, follow the instructions below:

ADDING NODES

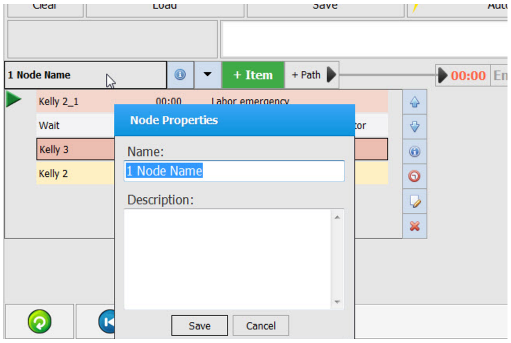
A branched scenario will consist of several “Nodes”. Each node is pre-configured to run a scenario or a series of palettes. The facilitator will then activate key events that will alter the trajectory of the nodes.

1. Click “Add Node” near the top of the window to begin .


SCENARIO
Clear
Load
Save
Auto-Responses
Print
Add Node
1 Node Name
+ Item
+ Path
00:00
End

Kelly 2_1	00:00	Labor emergency
Wait	01:00	No changes are made to simulator
Kelly 3	00:00	Emergency c-section

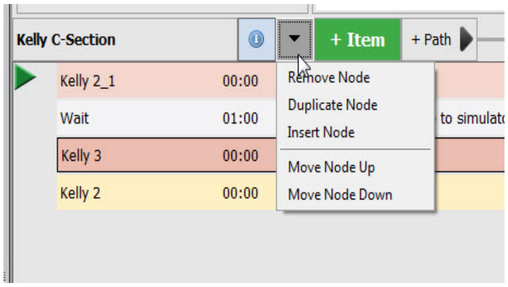
2. Click the node’s identifier button. Click Save to apply changes to edit the node name and description.


Clear
Load
Save
1 Node Name
+ Item
+ Path
00:00
Kelly 2_1
00:00
Labor emergency
Wait
Kelly 3
Kelly 2
Node Properties
Save
Cancel

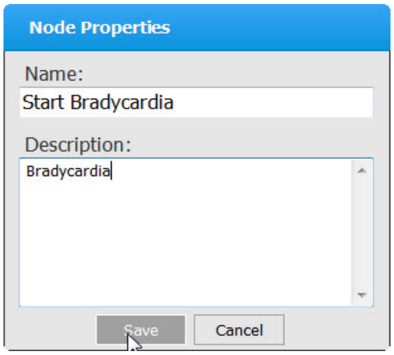
Name: 1 Node Name

Description:

3. Click the drop down menu to edit the node.


Kelly C-Section
+ Item
+ Path
Kelly 2_1 00:00
Wait 01:00
Kelly 3 00:00
Kelly 2 00:00
Remove Node
Duplicate Node
Insert Node
Move Node Up
Move Node Down
to simulat

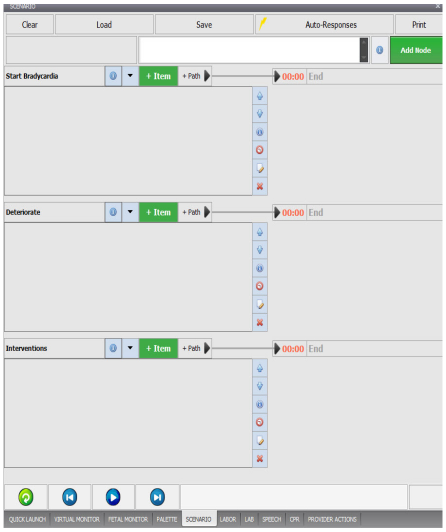
In the example below, the following nodes will be created to a brand new scenario: [1] Start Bradycardia, [2] Deteriorate, [3] Interventions, and [4] Atropine, [5] Epinephrine, [6] Dopamine and [8] Pace as possible responses.


Node Properties
Save
Cancel

Name: Start Bradycardia

Description: Bradycardia

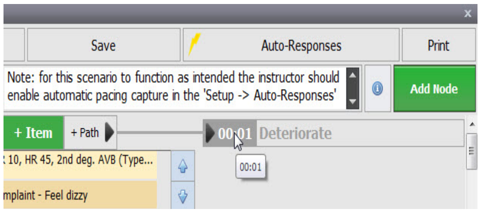
Add more nodes each with palette items to simulate every stage in the scenario. In this example, several nodes simulate the effects of medications that maybe administered to the patient by the provider. The first two nodes simulate the complication [1] Start Bradycardia, [2] Deteriorate. The following nodes: [3] Interventions, [4] Atropine, [5] Epinephrine, [6] Dopamine and [7] Pace are activated only when the provider administers the applicable medication or electrical therapy. Each node is programmed with palettes that simulate the effect described.


Clear
Load
Save
Auto-Responses
Print
Add Node
Start Bradycardia
+ Item
+ Path
00:00
End
Deteriorate
+ Item
+ Path
00:00
End
Interventions
+ Item
+ Path
00:00
End
QUICKLAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS

ADDING PATHS

A path refers to the trajectory from one node to another after the last palette in a node expires.

1. Click on the time limit icon to modify the "go to" point for the default path. After the last palette expires, the scenario will move on to the node as indicated by the arrow.

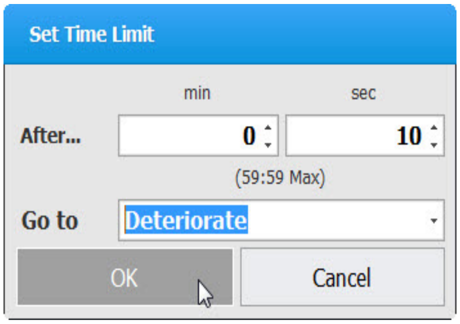

Save
Auto-Responses
Print
Add Node
+ Item
+ Path
00:01
Deteriorate
00:01

Note: for this scenario to function as intended the instructor should enable automatic pacing capture in the 'Setup -> Auto-Responses'

: 10, HR 45, 2nd deg. AVB (Type...

mplaint - Feel dizzy

2. Configure the countdown timer and the "go to" point for the default path. Click OK to save.

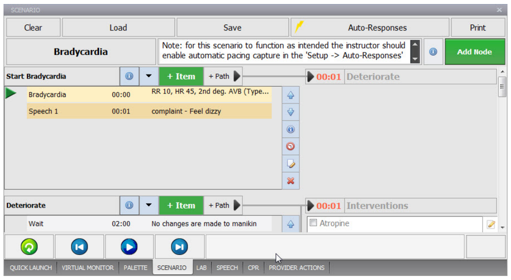

Set Time Limit
OK
Cancel

After... 0 min 10 sec

(59:59 Max)

Go to Deteriorate

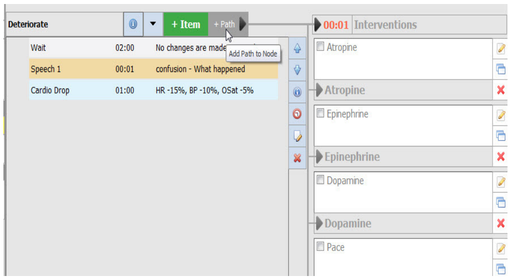
3. Node 1 is now configured to continue to Node 2 as indicated by the path's "go to" point.


Clear
Load
Save
Auto-Responses
Print
Bradycardia
Note: for this scenario to function as intended the instructor should enable automatic pacing capture in the 'Setup -> Auto-Responses'
Add Node
Start Bradycardia
+ Item
+ Path
00:01 Deteriorate
Bradycardia 00:00 RR 10, HR 45, 2nd deg. AVB (Type...
Speech 1 00:01 complaint - Feel dizzy
Deteriorate
00:01 Interventions
Wait 02:00 No changes are made to manikin
Atropine
QUICK LAUNCH
VIRTUAL MONITOR
PALETTE
SCENARIO
LAB
SPEECH
CPR
PROVIDER ACTIONS

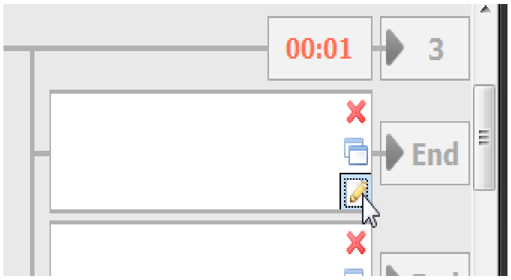
KEY EVENTS

Key events allow the facilitator to alter the trajectory of a branched scenario. This is done by assigning multiple paths to a single node, then selecting one of the paths when the provider completes a desired task. To add a key event to a node:

1. Click the Add path button, then the edit button located on the right.


Deteriorate
+ Item
+ Path
Add Path to Node
00:01 Interventions
Wait 02:00 No changes are made
Speech 1 00:01 confusion - What happened
Cardio Drop 01:00 HR -15%, BP -10%, OSat -5%
Atropine
Epinephrine
Dopamine
Pace

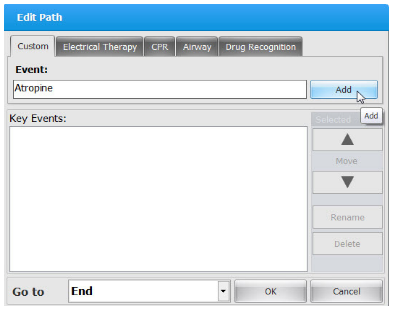
2. Use the Edit Path window to name, rename, sort and create key events.



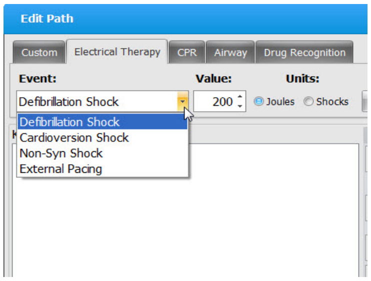
KEY EVENTS MENU

A key event is the action expected by the participant. The Key Event Menu includes Custom, Electrical Therapy, CPR, and Airway.

Custom tab allows to type a name for the event and then click "Add".


Edit Path
Custom
Electrical Therapy
CPR
Airway
Drug Recognition
Event:
Atropine
Add
Key Events:
Selected
Move
Rename
Delete
Go to
End
OK
Cancel

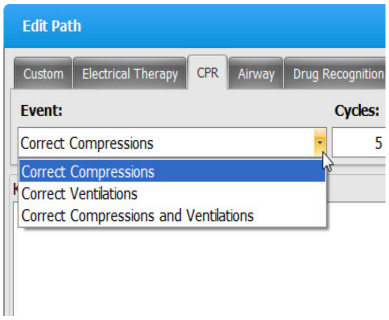
The remaining key event tabs like Electrical Therapy, CPR, Airway, and Drug Recognition have a drop down menu to select the different options.


Edit Path
Custom
Electrical Therapy
CPR
Airway
Drug Recognition
Event:
Value:
Units:
Defibrillation Shock
200
Joules
Shocks
Defibrillation Shock
Cardioversion Shock
Non-Syn Shock
External Pacing

The Electrical Therapy key event includes:

- Defibrillation Shock
- Cardioversion Shock
- Non-Sync Shock
- External Pacing

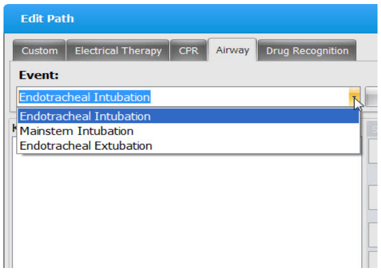
Select one of the options, then, set the parameters for response to either joules or number of shocks and click "Add"


Edit Path
Custom
Electrical Therapy
CPR
Airway
Drug Recognition
Event:
Cycles:
Correct Compressions
5
Correct Compressions
Correct Ventilations
Correct Compressions and Ventilations

The CPR key event includes:

- Correct Compressions
- Correct Ventilations
- Correct Compressions and Ventilations.

Select one of the options, then set the amount of cycles and click “Add”.


Edit Path
Custom
Electrical Therapy
CPR
Airway
Drug Recognition
Event:
Endotracheal Intubation
Endotracheal Intubation
Mainstem Intubation
Endotracheal Extubation

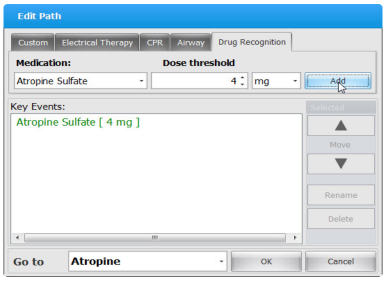
The Airway key event includes:

- Endotracheal Intubation
- Mainstem Intubation
- Endotracheal Extubation

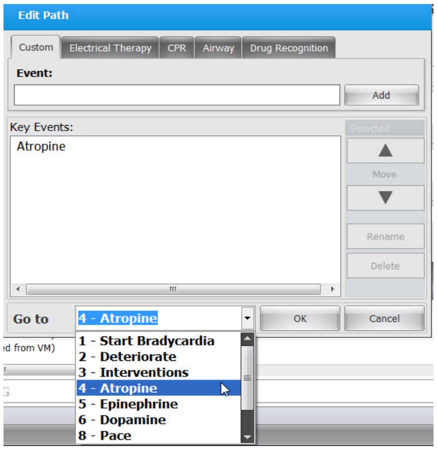
Select one of the options, then click “Add”.

The Drug Recognition key event is exclusive to the automatic mode. Program the medication linked action to trigger an alternate path when the system detects that the specific medication has been administered to the simulator.

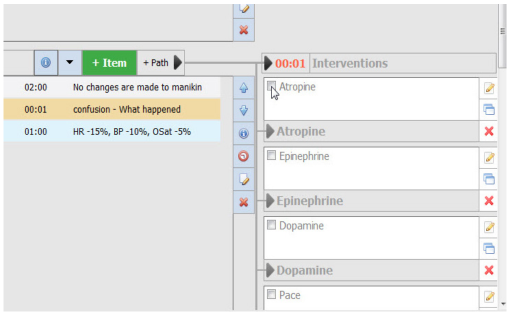
Select the desired medication from the drop down menu, set the dose threshold, and click add.


Medication: Atropine Sulfate
Dose threshold: 4 mg
Key Events: Atropine Sulfate [4 mg]
Go to: Atropine
Edit Path
Custom
Electrical Therapy
CPR
Airway
Drug Recognition
Add
Selected
Move
Rename
Delete
OK
Cancel

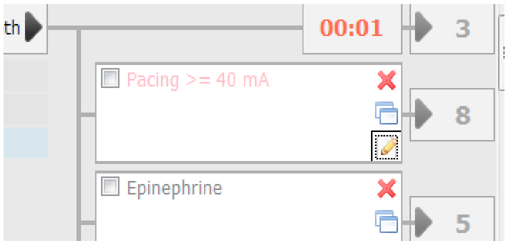
After the event is added to the Key Events list, assign the node that this action will move the scenario to, using the “Go to” menu. Click “OK” to save changes.


Key Events: Atropine
Go to: 4 - Atropine
Edit Path
Custom
Electrical Therapy
CPR
Airway
Drug Recognition
Event:
Add
Selected
Move
Rename
Delete
OK
Cancel
1 - Start Bradycardia
2 - Deteriorate
3 - Interventions
4 - Atropine
5 - Epinephrine
6 - Dopamine
8 - Pace
ed from VM)

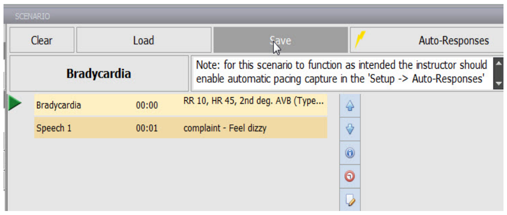
In the figure below, node 2 is configured with four alternate paths. Once the provider performs any one of the actions listed as key events, checkmark the key event to activate the alternate path.


02:00 No changes are made to manikin
00:01 confusion - What happened
01:00 HR -15%, BP -10%, OSat -5%
+ Item
+ Path
00:01
Interventions
Atropine
Atropine
Epinephrine
Epinephrine
Dopamine
Dopamine
Pace

The key event is now programmed to move the scenario to node 8 if pacing is detected.


th
00:01
3
Pacing >= 40 mA
8
Epinephrine
5

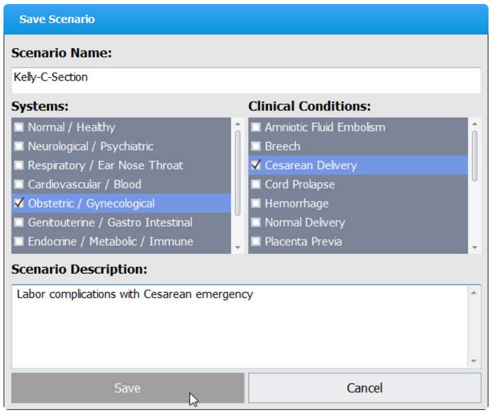
3. Click “Save Scenario” to store the scenario in the current profile for later use.


Note: for this scenario to function as intended the instructor should enable automatic pacing capture in the 'Setup -> Auto-Responses'

Bradycardia	00:00	RR 10, HR 45, 2nd deg. AVB (Type...
Speech 1	00:01	complaint - Feel dizzy

SCENARIO
Clear
Load
Save
Auto-Responses
Bradycardia

4. Type in a name, assign a system and a clinical condition. Then, add a description for the new scenario and click Save.

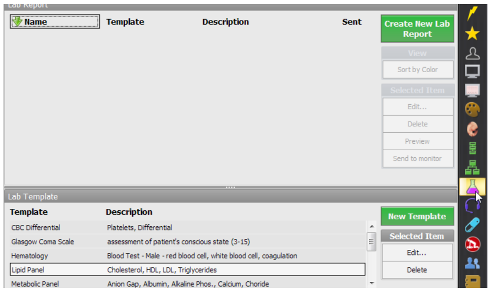

Scenario Name: Kelly-C-Section

Systems:	Clinical Conditions:
☐ Normal / Healthy	☐ Amniotic Fluid Embolism
☐ Neurological / Psychiatric	☐ Breech
☐ Respiratory / Ear Nose Throat	☑ Cesarean Delivery
☐ Cardiovascular / Blood	☐ Cord Prolapse
☑ Obstetric / Gynecological	☐ Hemorrhage
☐ Genitourterine / Gastro Intestinal	☐ Normal Delivery
☐ Endocrine / Metabolic / Immune	☐ Placenta Previa

Scenario Description: Labor complications with Cesarean emergency
Save Scenario
Save
Cancel

Labs

Use the Lab tab to create mock laboratory test results to aid the participants during simulation. In addition, create new laboratory templates to supplement different types of scenarios. Once a laboratory report is created, send the file to the virtual monitor screen for the providers to access during the exercise.



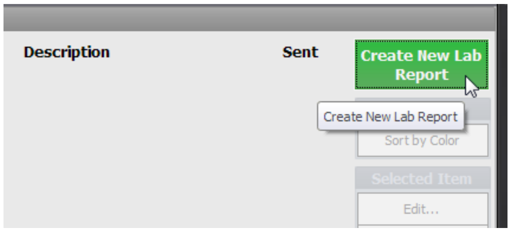
Lab Report
Name
Template
Description
Sent
Create New Lab Report
View
Sort by Color
Selected Item
Edit...
Delete
Preview
Send to monitor
Lab Template
New Template
Selected Item
Edit...
Delete

Template	Description
CBC Differential	Platelets, Differential
Glasgow Coma Scale	assessment of patient's conscious state (3-15)
Hematology	Blood Test - Male - red blood cell, white blood cell, coagulation
Lipid Panel	Cholesterol, HDL, LDL, Triglycerides
Metabolic Panel	Anion Gap, Albumin, Alkaline Phos., Calcium, Choride

PREPARING A LAB REPORT

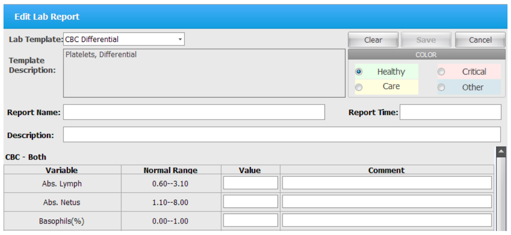
To create a new lab report with mock test results:

1. Click “Create a New Lab Report” on the right panel.



Description
Sent
Create New Lab Report
Create New Lab Report
Sort by Color
Selected Item
Edit...

The “Edit Lab Report” window is displayed.



Edit Lab Report
Clear
Save
Cancel
COLOR
● Healthy
○ Critical
○ Care
○ Other

Lab Template: CBC Differential

Template Description: Platelets, Differential

Report Name:

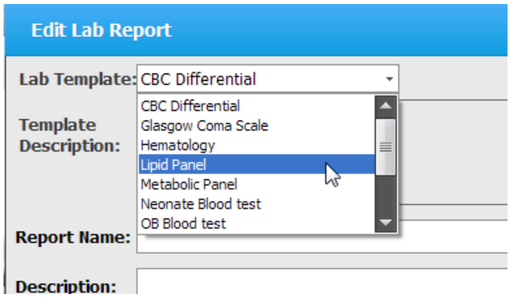
Report Time:

Description:

CBC - Both

Variable	Normal Range	Value	Comment
Abs. Lymph	0.60--3.10		
Abs. Netus	1.10--8.00		
Basophils(%)	0.00--1.00		

2. Select a “Lab Template” from the drop down menu.



Edit Lab Report
CBC Differential
Glasgow Coma Scale
Hematology
Lipid Panel
Metabolic Panel
Neonate Blood test
OB Blood test

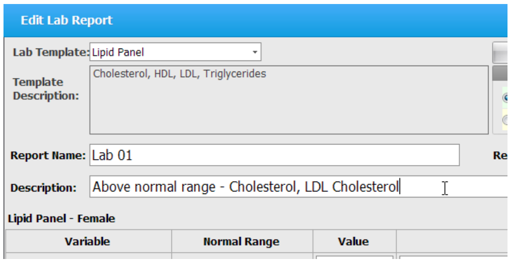
Lab Template: CBC Differential

Template Description:

Report Name:

Description:

3. Enter a report name, a report time, and a description. In addition, select a color tag for the lab report on the right panel. Color tags aid the sorting of lab reports on the report list window.



Edit Lab Report

Lab Template: Lipid Panel

Template Description: Cholesterol, HDL, LDL, Triglycerides

Report Name: Lab 01

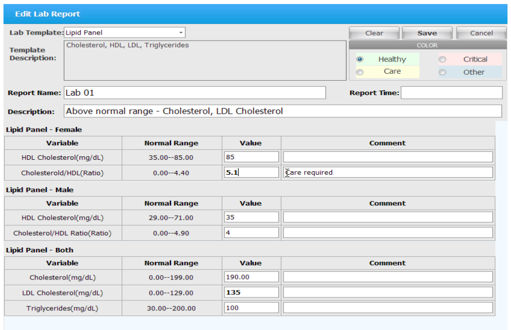
Description: Above normal range - Cholesterol, LDL Cholesterol

Lipid Panel - Female

Variable	Normal Range	Value

4. Enter the test results in the “Value” column. Include any comments associated with the test performed.

Lab result values for each of the preprogrammed scenarios in the Quick Start Simulator profile are included in the Simulator Workbook.



Edit Lab Report
Clear
Save
Cancel
COLOR
● Healthy
○ Critical
○ Care
○ Other

Lab Template: Lipid Panel

Template Description: Cholesterol, HDL, LDL, Triglycerides

Report Name: Lab 01

Report Time:

Description: Above normal range - Cholesterol, LDL Cholesterol

Lipid Panel - Female

Variable	Normal Range	Value	Comment
HDL Cholesterol(mg/dL)	35.00--85.00	85	
Cholesterold/HDL(Ratio)	0.00--4.40	5.1	Care required

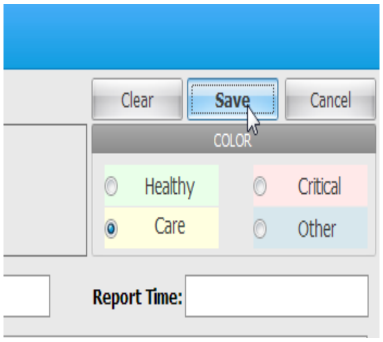
Lipid Panel - Male

Variable	Normal Range	Value	Comment
HDL Cholesterol(mg/dL)	29.00--71.00	35	
Cholesterol/HDL Ratio(Ratio)	0.00--4.90	4	

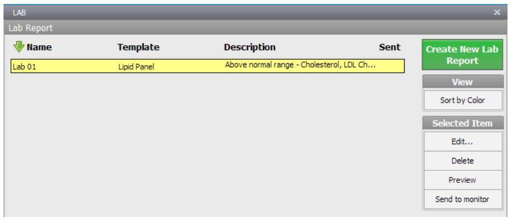
Lipid Panel - Both

Variable	Normal Range	Value	Comment
Cholesterol(mg/dL)	0.00--199.00	190.00	
LDL Cholesterol(mg/dL)	0.00--129.00	135	
Triglycerides(mg/dL)	30.00--200.00	100	

5. Click “Save” to create the lab report.

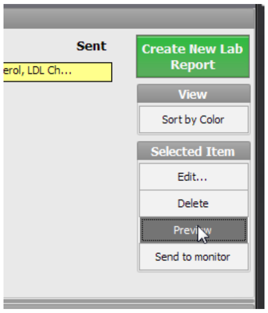

Clear
Save
Cancel
COLOR
Healthy
Critical
Care
Other
Report Time:

The newly created lab report is now listed in the “Lab Reports” section. Sort lab reports by name, template, description, or color tag.

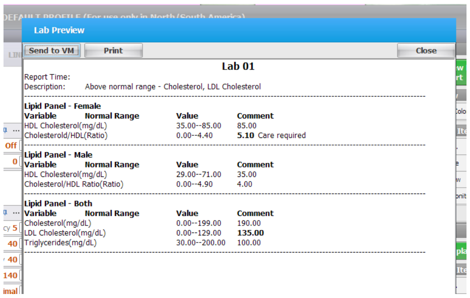

LAB
Lab Report
Create New Lab Report
View
Sort by Color
Selected Item
Edit...
Delete
Preview
Send to monitor

Name	Template	Description	Sent
Lab 01	Lipid Panel	Above normal range - Cholesterol, LDL Ch...	

6. Click “Preview” to review the final lab report.


Sent
erol, LDL Ch...
Create New Lab Report
View
Sort by Color
Selected Item
Edit...
Delete
Preview
Send to monitor

The preview window displays the test results how the provider will see them on the virtual monitor screen. If the computer is connected to a printer, click PRINT to create a hard copy.


DEFAULT PROFILE (For use only in North/South America)
Lab Preview
Send to VM
Print
Close

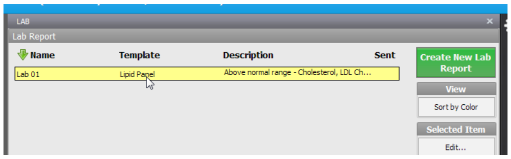
```
Lab 01
Report Time:
Description:     Above normal range - Cholesterol, LDL Cholesterol
--------------------------------------------------------------------
Lipid Panel - Female
Variable        Normal Range            Value           Comment
HDL Cholesterol(mg/dL)                  35.00--85.00    85.00
Cholesterold/HDL(Ratio)                 0.00--4.40      5.10 Care required
--------------------------------------------------------------------
Lipid Panel - Male
Variable        Normal Range            Value           Comment
HDL Cholesterol(mg/dL)                  29.00--71.00    35.00
Cholesterol/HDL Ratio(Ratio)            0.00--4.90      4.00
--------------------------------------------------------------------
Lipid Panel - Both
Variable        Normal Range            Value           Comment
Cholesterol(mg/dL)                      0.00--199.00    190.00
LDL Cholesterol(mg/dL)                  0.00--129.00    135.00
Triglycerides(mg/dL)                    30.00--200.00   100.00
--------------------------------------------------------------------
```

SEND TO MONITOR

Send the completed lab report to the virtual monitor screen to assist the care provider.

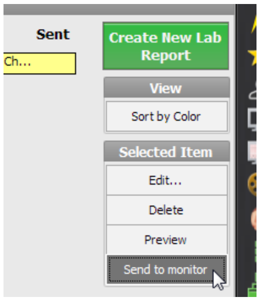
To transfer the lab report to the virtual monitor screen:

1. First, select the report from the lab reports list.

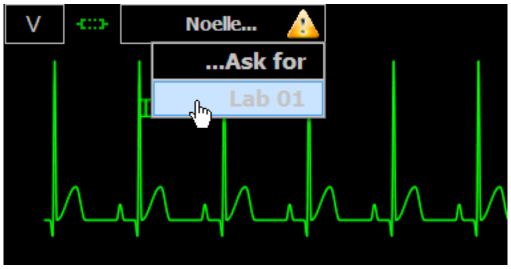

LAB
Lab Report
Create New Lab Report
View
Sort by Color
Selected Item
Edit...

Name	Template	Description	Sent
Lab 01	Lipid Panel	Above normal range - Cholesterol, LDL Ch...	

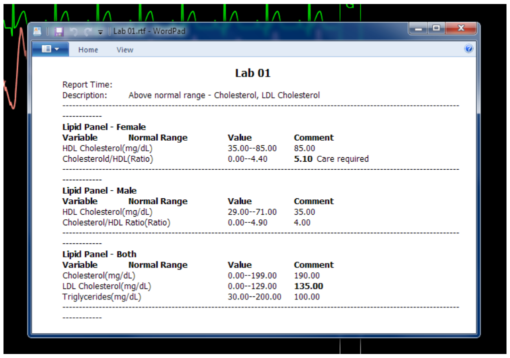
2. Click “Send to Monitor” button to transfer the lab report to the virtual monitor.


Sent
Ch...
Create New Lab Report
View
Sort by Color
Selected Item
Edit...
Delete
Preview
Send to monitor

3. An exclamation icon notifies the provider a file is ready for access on the Gaumard Monitors. Instruct the participant to click the patient menu drop down and select the lab report.


V
Noelle...
...Ask for
Lab 01

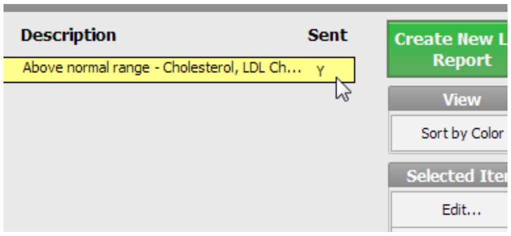
4. The lab report opens using the system’s default application.


Lab 01.rtf - WordPad
Home
View

```
Lab 01
Report Time:
Description:     Above normal range - Cholesterol, LDL Cholesterol
--------------------------------------------------------------------
------------
Lipid Panel - Female
Variable        Normal Range            Value           Comment
HDL Cholesterol(mg/dL)                  35.00--85.00    85.00
Cholesterold/HDL(Ratio)                 0.00--4.40      5.10 Care required
--------------------------------------------------------------------
------------
Lipid Panel - Male
Variable        Normal Range            Value           Comment
HDL Cholesterol(mg/dL)                  29.00--71.00    35.00
Cholesterol/HDL Ratio(Ratio)            0.00--4.90      4.00
--------------------------------------------------------------------
------------
Lipid Panel - Both
Variable        Normal Range            Value           Comment
Cholesterol(mg/dL)                      0.00--199.00    190.00
LDL Cholesterol(mg/dL)                  0.00--129.00    135.00
Triglycerides(mg/dL)                    30.00--200.00   100.00
--------------------------------------------------------------------
------------
```

5. The letter Y represents a shared document. Click the “Stop Sharing button” on the right

panel to remove the lab report items from the Gaumard Monitors menu.


Description
Sent
Create New L
Report
View
Sort by Color
Selected Ite
Edit...

Above normal range - Cholesterol, LDL Ch... Y

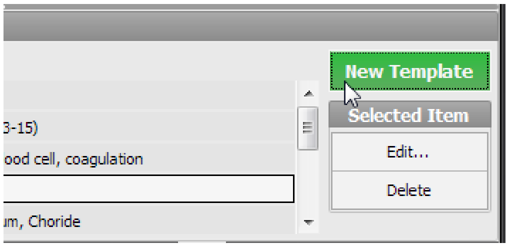
An editable copy of the lab report is stored inside the Gaumard_UI folder on the computer's home screen. Go to page 19 for information on how to access other files from the Gaumard Monitor screen.

CREATING A LAB TEMPLATE

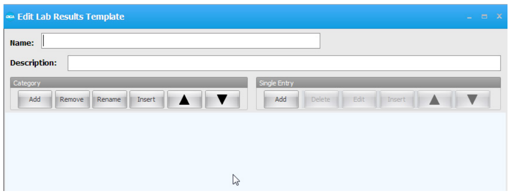
Build new lab templates to supplement new scenarios.

To create a new laboratory test template:

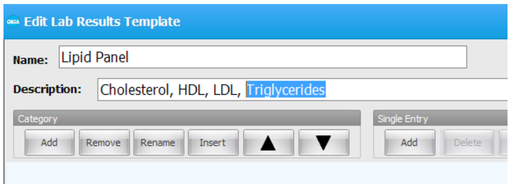
1. Navigate to the bottom of the tab and click "New Template".


3-15)
ood cell, coagulation
um, Choride
New Template
Selected Item
Edit...
Delete

The "Edit Lab Results Template" window is displayed.


Edit Lab Results Template
Name:
Description:
Category
Add
Remove
Rename
Insert
Single Entry
Add
Delete
Edit
Insert

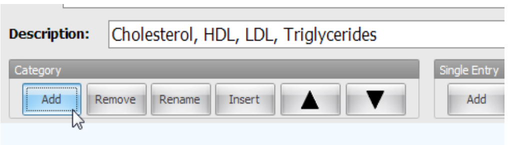
2. Enter a name for the new template followed by a description.


Edit Lab Results Template
Category
Add
Remove
Rename
Insert
Single Entry
Add
Delete

Name: Lipid Panel

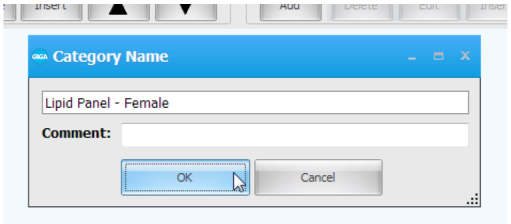
Description: Cholesterol, HDL, LDL, Triglycerides

3. Create categories to group a series of tests in a lab report. Click "Add" to create a new category.


Category
Add
Remove
Rename
Insert
Single Entry
Add

Description: Cholesterol, HDL, LDL, Triglycerides

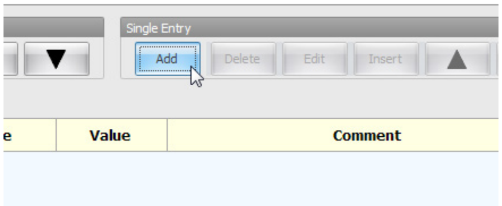
4. Enter the name of the category and click "OK".


Category Name
OK
Cancel

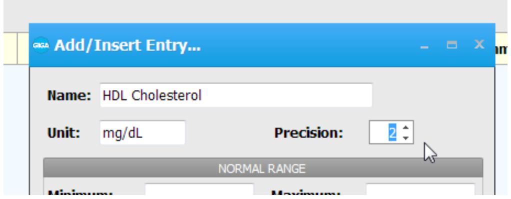
Lipid Panel - Female

Comment:

5. Click "add" on the "Single Entry" menu to create a new test under the current category.


Single Entry
Add
Delete
Edit
Insert
e
Value
Comment

6. Enter the name of the test, the unit, and decimal precision.

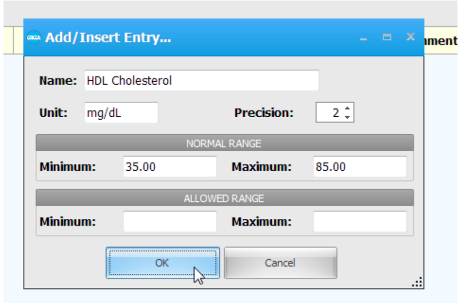

Add/Insert Entry...
NORMAL RANGE

Name: HDL Cholesterol

Unit: mg/dL

Precision: 2

7. Enter a "Normal Range" as a reference for the provider. The normal range is visible on the lab report. The "Allowed Range" restricts the minimum and maximum value that can be entered a test result. Click "OK" to add the new test.


Add/Insert Entry...
ment
NORMAL RANGE
ALLOWED RANGE
OK
Cancel

Name: HDL Cholesterol

Unit: mg/dL

Precision: 2

NORMAL RANGE

Minimum: 35.00

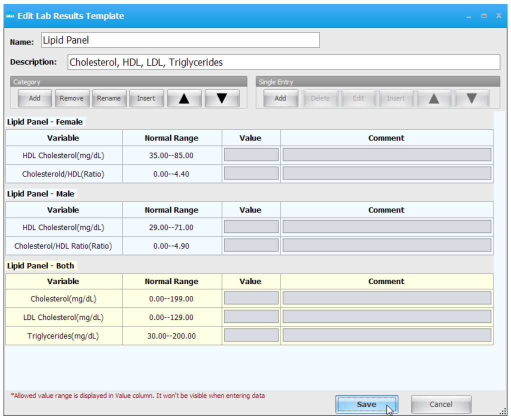
Maximum: 85.00

ALLOWED RANGE

Minimum:

Maximum:

8. Repeat the process to add more tests and categories. Click “Save” to create the new lab template.


Edit Lab Results Template
Category
Add
Remove
Rename
Insert
▲
▼
Single Entry
Add
Delete
Edit
Insert
▲
▼
Save
Cancel

Name: Lipid Panel

Description: Cholesterol, HDL, LDL, Triglycerides

Lipid Panel - Female

Variable	Normal Range	Value	Comment
HDL Cholesterol(mg/dL)	35.00--85.00		
Cholesterold/HDL(Ratio)	0.00--4.40		

Lipid Panel - Male

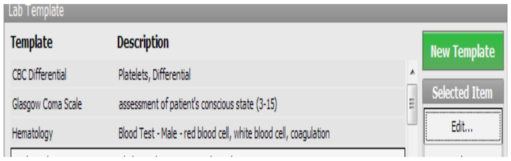
Variable	Normal Range	Value	Comment
HDL Cholesterol(mg/dL)	29.00--71.00		
Cholesterol/HDL Ratio(Ratio)	0.00--4.90		

Lipid Panel - Both

Variable	Normal Range	Value	Comment
Cholesterol(mg/dL)	0.00--199.00		
LDL Cholesterol(mg/dL)	0.00--129.00		
Triglycerides(mg/dL)	30.00--200.00		

*Allowed value range is displayed in Value column. It won't be visible when entering data

The new template is listed on the “Lab Template” section at the bottom of the Lab tab. Use the buttons on the left panel to edit or delete lab templates.

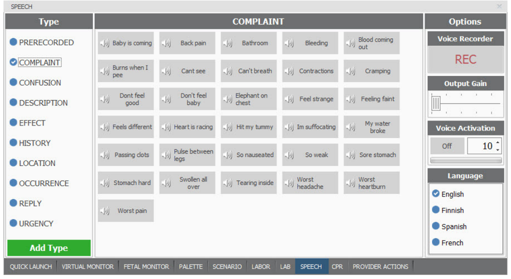

Lab Template
New Template
Selected Item
Edit...

Template	Description
CBC Differential	Platelets, Differential
Glasgow Coma Scale	assessment of patient's conscious state (3-15)
Hematology	Blood Test - Male - red blood cell, white blood cell, coagulation

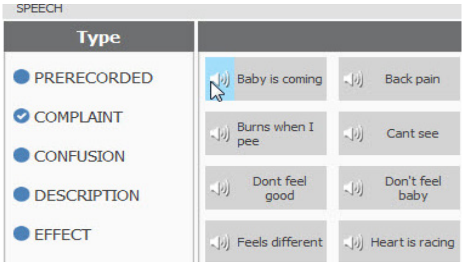
Speech

PRERECORDED SOUNDS

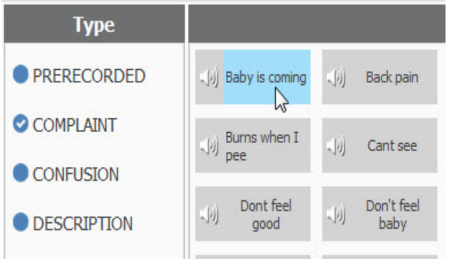
Select the Speech tab to command the simulator to speak aloud. The collection of speech and other sounds covers a wide range scenarios. In addition, use the streaming voice option to speak as the simulator's voice and listen to the student responses.


SPEECH
Type
PRERECORDED
COMPLAINT
CONFUSION
DESCRIPTION
EFFECT
HISTORY
LOCATION
OCCURRENCE
REPLY
URGENCY
Add Type
COMPLAINT
Baby is coming
Back pain
Bathroom
Bleeding
Blood coming out
Burns when I pee
Cant see
Can't breath
Contractions
Cramping
Dont feel good
Don't feel baby
Elephant on chest
Feel strange
Feeling faint
Feels different
Heart is racing
Hit my tummy
Im suffocating
My water broke
Passing clots
Pulse between legs
So nauseated
So weak
Sore stomach
Stomach hard
Swollen all over
Tearing inside
Worst headache
Worst heartburn
Worst pain
Options
Voice Recorder
REC
Output Gain
Voice Activation
Off
10
Language
English
Finnish
Spanish
French
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS

Click the volume icon to preview the sound before to play it.


SPEECH
Type
PRERECORDED
COMPLAINT
CONFUSION
DESCRIPTION
EFFECT
Baby is coming
Back pain
Burns when I pee
Cant see
Dont feel good
Don't feel baby
Feels different
Heart is racing

Click the phrase button to have the simulator speak the phrase aloud. Alternatively, program the phrases into a scenario to have the simulator speak automatically, refer to Scenarios Subsection.

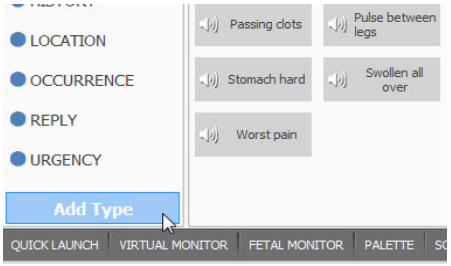

Type
PRERECORDED
COMPLAINT
CONFUSION
DESCRIPTION
Baby is coming
Back pain
Burns when I pee
Cant see
Dont feel good
Don't feel baby

SPEECH TYPE

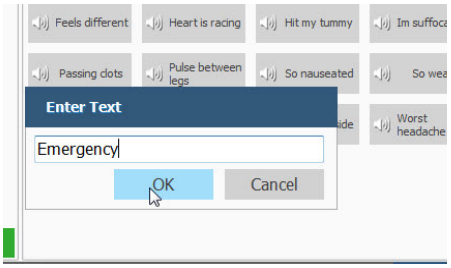
The Speech window allows user to arrange the phrases into new speech types to meet your simulation requirements.

Follow the instructions below to create a new speech type:

1. Click “Add type to create a new speech category

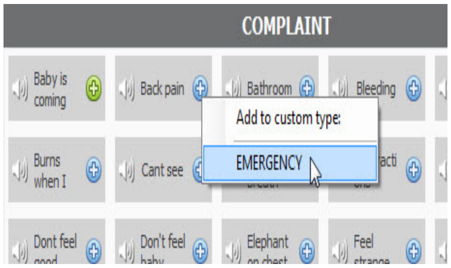

LOCATION
OCCURRENCE
REPLY
URGENCY
Add Type
Passing clots
Pulse between legs
Stomach hard
Swollen all over
Worst pain
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE

2. Enter a name for the new type and click “OK”



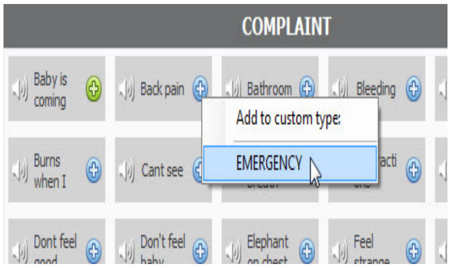
Feels different
Heart is racing
Hit my tummy
Im suffoca
Passing clots
Pulse between legs
So nauseated
So wea
Enter Text
Emergency
OK
Cancel
Worst headache

3. Select the phrases to be included into the new speech type using the “Plus” icon and select the name of the new type



COMPLAINT
Baby is coming
Back pain
Bathroom
Bleeding
Add to custom type:
EMERGENCY
Burns when I
Cant see
Dont feel good
Don't feel baby
Elephant on chest
Feel strange

The phrases will be listed into the Emergency category now.



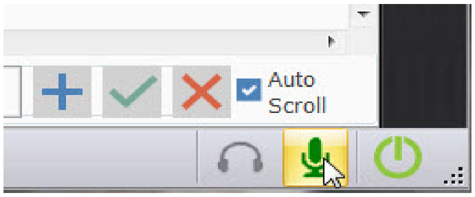
COMPLAINT
Baby is coming
Back pain
Bathroom
Bleeding
Add to custom type:
EMERGENCY
Burns when I
Cant see
Dont feel good
Don't feel baby
Elephant on chest
Feel strange

STREAMING AUDIO

Use the streaming voice to speak as the simulator's voice and engage the provider in a realistic conversation. In addition, record and save custom phrases to be played back during scenarios automatically.

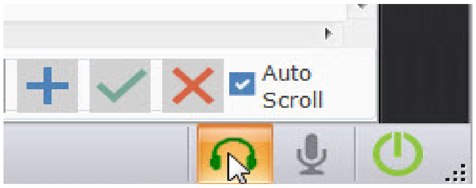
Ensure that the headset and microphone are connected to the PC before starting the UNI software. The headset minimizes echo and environmental noise to improve audio quality.

Click the “talk” icon and speak in to the headset to talk as the simulator's voice.



☑ Auto Scroll

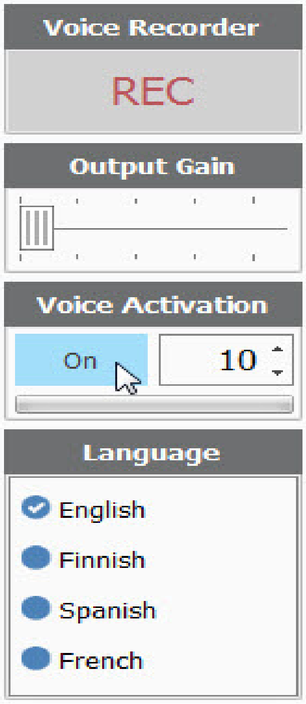
To listen to the provider's response, click “Listen”.



☑ Auto Scroll

VOICE ACTIVATION

Enable the “Voice Activation” feature to switch to the talk mode when voice input is detected automatically. Adjust the mic threshold to set the voice activation sensitivity. The higher the threshold, the less sensitive the microphone is; and vice versa. For instance, if the threshold is set to high, the voice input volume must be high to trigger the voice activation.


Voice Recorder
REC
Output Gain
Voice Activation
On
10
Language
English
Finnish
Spanish
French

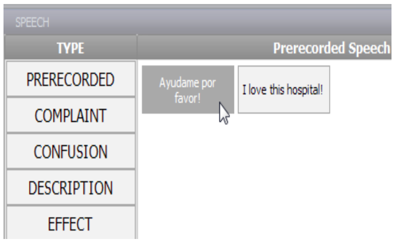
VOICE CLARITY

Voice clarity can be affected by several factors. To improve audio for the listen and talk options please review the following information.

- Connect the headset to the computer before activating the Gaumard control software
- Connect to the simulator using the strongest channel. Assign separate channels to each simulator if working with multiple simulators at a time.
- Adjust the physical mic control attached to the headset cable.
- Adjust the streaming voice "Output Gain" To raise the output gain in increments, tap and hold the control, then slide to the desired level. Higher gain levels increase the talk volume but degrade the audio quality.
- Fine-tune the Windows® microphone settings. For more information on the Windows® settings, go to page 95.

PRERECORDED SPEECH

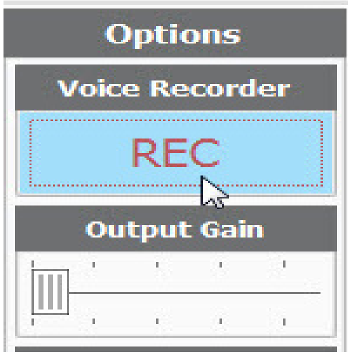
Create a library of custom recordings to play back as the simulator's voice using the "Prerecorded Speech" feature.


SPEECH
TYPE
Prerecorded Speech
PRERECORDED
COMPLAINT
CONFUSION
DESCRIPTION
EFFECT
Ayudame por favor!
I love this hospital!

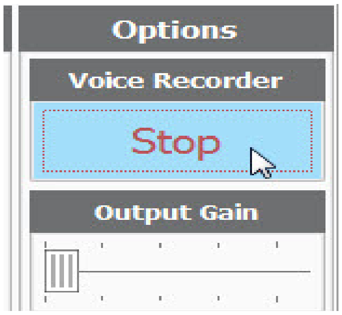
VOICE RECORDER

To record a new custom phrase:

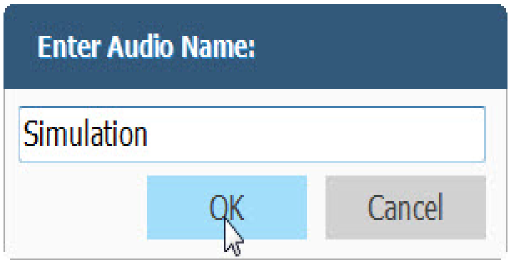
1. Click the "Rec" button and speak into the microphone.


Options
Voice Recorder
REC
Output Gain

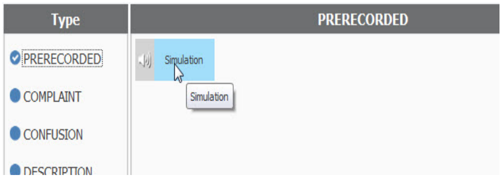
2. Press "Stop" to finish recording.


Options
Voice Recorder
Stop
Output Gain

3. Enter a name and click "OK."

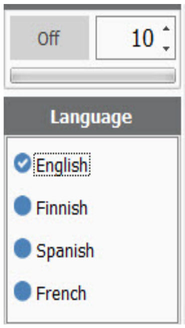

Enter Audio Name: Simulation

4. The new phrase is listed under the “Prerecorded Speech” menu.


Type
PRERECORDED
PRERECORDED
COMPLAINT
CONFUSION
DESCRIPTION
Simulation
Simulation

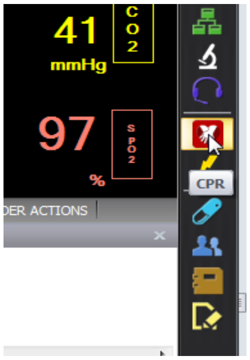
SPEECH LANGUAGE

There are 4 available languages (English, Finnish, Spanish, and French). English is selected as default, switch the language option to have the simulator phrases in any of the other 3 languages available.


Off
10
Language
English
Finnish
Spanish
French

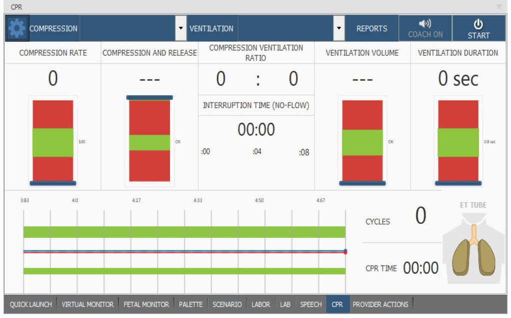
CPR

UNI features a CPR performance evaluator and trainer. Click the CPR icon on the vertical menu bar to open the CPR window.


41
mmHg
CO2
97
%
SPO2
ER ACTIONS
CPR

This tool allows the instructor to get real-time feedback on the current compressions and ventilations being done by the providers.

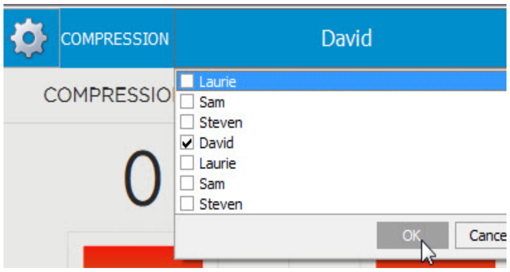
It is important to know that the chest compressions will only give feedback to the instructor if the blood pressure is below 60, and ventilations will only be reported if the respiration rate is set to zero.


CPR
COMPRESSION
VENTILATION
REPORTS
COACH ON
START
COMPRESSION RATE
COMPRESSION AND RELEASE
COMPRESSION VENTILATION RATIO
VENTILATION VOLUME
VENTILATION DURATION
0
---
0 : 0
---
0 sec
INTERRUPTION TIME (NO-FLOW)
00:00
CYCLES
0
CPR TIME
00:00
ET TUBE
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS

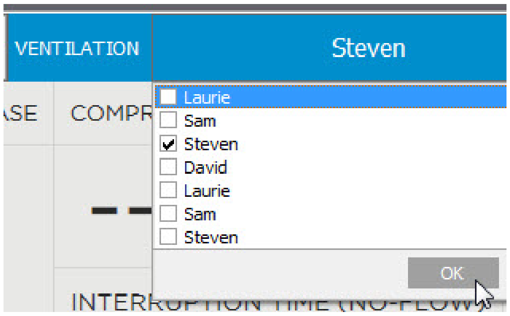
Open this window when your students or providers are ready to start performing compressions and/or ventilations

SESSION INFORMATION

Assign the provider who will perform compressions


COMPRESSION
David
COMPRESSIO
0
☐ Laurie
☐ Sam
☐ Steven
☑ David
☐ Laurie
☐ Sam
☐ Steven
OK
Cance

Assign the provider who will perform ventilations.

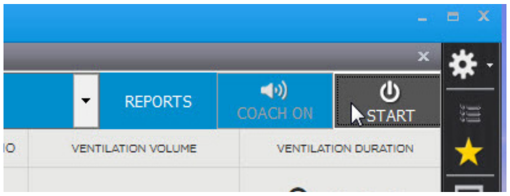

VENTILATION
Steven
SE
COMPR
☐ Laurie
☐ Sam
☑ Steven
☐ David
☐ Laurie
☐ Sam
☐ Steven
OK
INTERRUPTION TIME (NO-FLOW)

For instructions on how to create a provider list, refer to “Provider Actions” subsection inside the “Working with UNI” section.

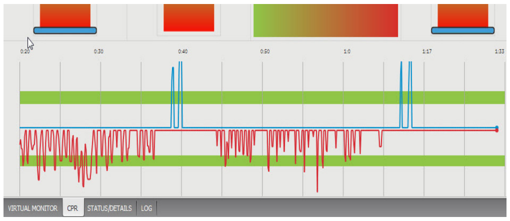
TESTING

The test mode provides compression and ventilation feedback in real time without audible cues.

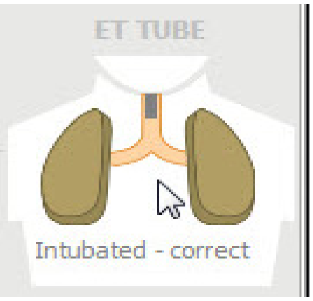
To begin, press the Start button. Perform compressions and ventilations to obtain:

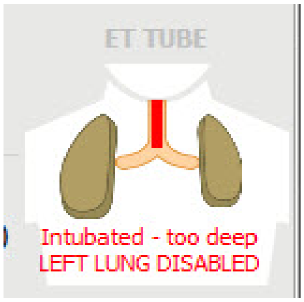

REPORTS
COACH ON
START
VENTILATION VOLUME
VENTILATION DURATION

- Graphical representation of compressions and ventilations: the ventilations are represented by the blue segment and the compressions by the red segment.


VIRTUAL MONITOR
CPR
STATUS/DETAILS
LOG

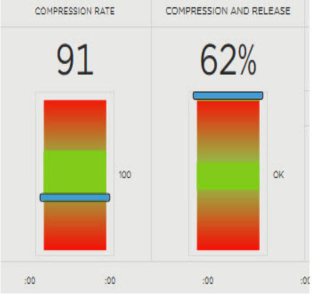
- Airway system view: The lungs and trachea are responsive to provider actions


ET TUBE
Intubated - correct


ET TUBE
Intubated - too deep
LEFT LUNG DISABLED

- Compression rate and depth indicators:

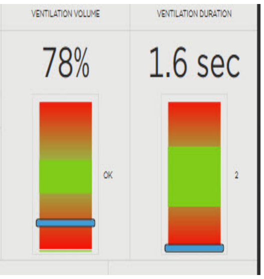
The compression rate and depth indicators are located to the left of the CPR window. The indicator's fill color changes between the following states:


COMPRESSION RATE
COMPRESSION AND RELEASE
91
62%
100
OK
:00
:00
:00

1. Orange/Red: compression depth and rate were either too shallow or too deep.
2. Green: compression depth and rate were performed in the correct range This includes full release.

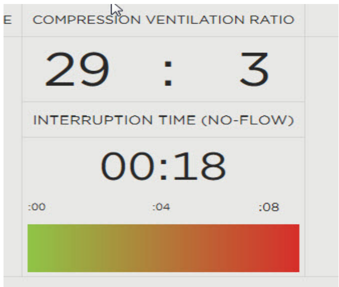
- Ventilation volume and duration indicators

The ventilation volume and duration indicators are located to the right of the CPR window. The indicator's fill color changes between the following states:


VENTILATION VOLUME
VENTILATION DURATION
78%
1.6 sec
OK
2

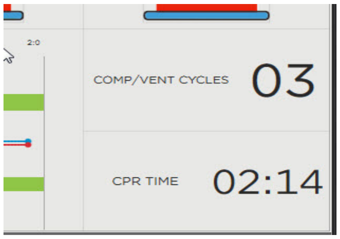
1. Orange/Red: Ventilation volume and duration were either too weak/short or too strong/long
2. Green: Ventilation volume and duration were performed in the correct range

Compression/Ventilation ratio is located in the center of the CPR window. The No-Flow Time shows the time without performing compressions.


COMPRESSION VENTILATION RATIO
29 : 3
INTERRUPTION TIME (NO-FLOW)
00:18
:00
:04
:08

- Comp/Vent Cycles and CPR Time

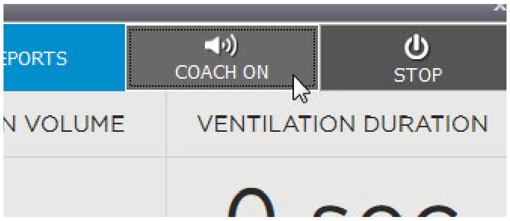
Comp/Vent Cycles value shows the number of cycles performed. The CPR Time shows the total time of the CPR activity.


COMP/VENT CYCLES 03

CPR TIME 02:14

COACH

The coach mode is enabled when the Coach button is pressed.


EPORTS
COACH ON
STOP
N VOLUME
VENTILATION DURATION

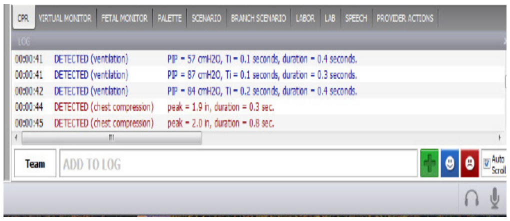
The coach mode generates audible cues of the compression to ventilation ratio programmed in the Options menu. For example, if this ratio is set to 30 compressions to 2 ventilations, the coach mode will start with 30 short beeps to signal the compressions followed by 2 long beeps to signal the ventilations.

Notice that the ventilation beeps will not start until the first ventilation is detected. The compression and ventilation beeps will be synchronized with the compression rate and ventilation duration.

In addition to providing training on the CPR rate, the coach mode also enables audible commands when the compression meets the following criteria:

- If the compressions per minute are below the programmed settings, the audible command FASTER is played.
- If the compressions per minute are above the programmed settings, the audible command SLOWER is played.
- If the compressions depth is below the programmed settings, the audible command HARDER is played.
- If the compressions depth is above the programmed settings, the audible command TOO DEEP is played
- If the compressions recoil is not complete, the audible command RELEASE is played

Compression and ventilation data is displayed in the log window as CPR is performed by the provider

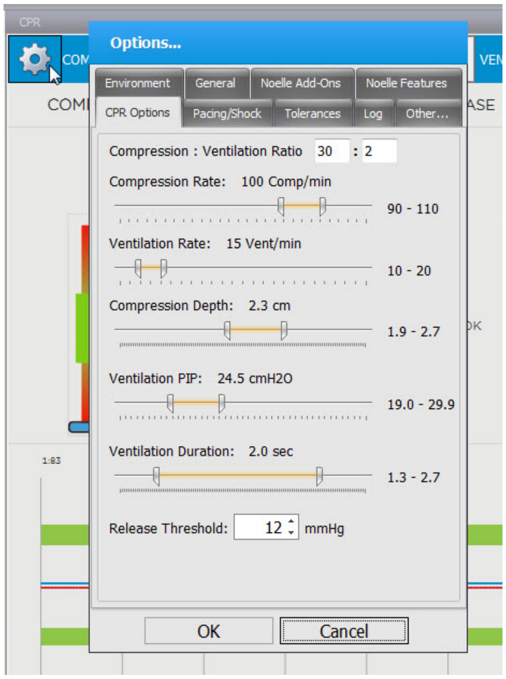

CPR
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS
LOG
Team
ADD TO LOG
Auto Scroll

```
00:00:41   DETECTED (ventilation)         PIP = 57 cmH2O, Ti = 0.1 seconds, duration = 0.4 seconds.
00:00:41   DETECTED (ventilation)         PIP = 87 cmH2O, Ti = 0.1 seconds, duration = 0.3 seconds.
00:00:42   DETECTED (ventilation)         PIP = 84 cmH2O, Ti = 0.2 seconds, duration = 0.4 seconds.
00:00:44   DETECTED (chest compression)   peak = 1.9 in, duration = 0.3 sec.
00:00:45   DETECTED (chest compression)   peak = 2.0 in, duration = 0.8 sec.
```

CPR SETTINGS

Access the CPR settings to adjust:

- Compression per Ventilation Ratio
- Compression Rate
- Ventilation Rate
- Compression Depth
- Ventilation PIP (Peak Inspiratory Pressure)
- Ventilation Duration

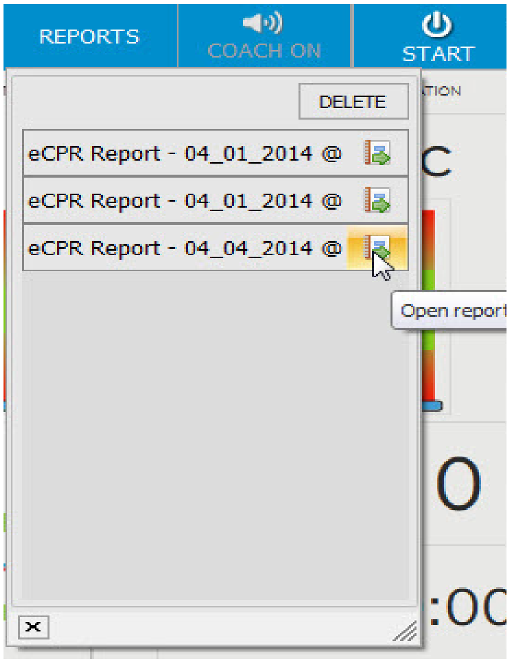

CPR
Options...
Environment
General
Noelle Add-Ons
Noelle Features
CPR Options
Pacing/Shock
Tolerances
Log
Other...
OK
Cancel

Compression : Ventilation Ratio 30 : 2
Compression Rate: 100 Comp/min 90 - 110
Ventilation Rate: 15 Vent/min 10 - 20
Compression Depth: 2.3 cm 1.9 - 2.7
Ventilation PIP: 24.5 cmH2O 19.0 - 29.9
Ventilation Duration: 2.0 sec 1.3 - 2.7
Release Threshold: 12 mmHg

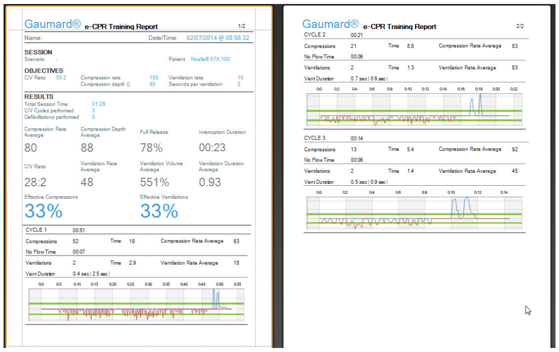
REPORT

After completing a CPR session, load the results by clicking the “Reports” button. A drop down menu will load with a list of the available reports.

Click on the “Open report” button to load the file. To delete a file, check the “DELETE” button.

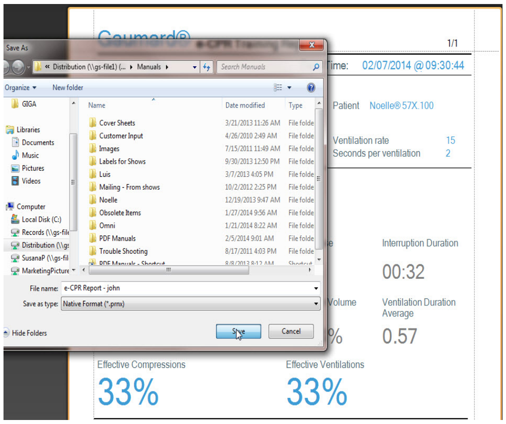

REPORTS
COACH ON
START
DELETE
eCPR Report - 04_01_2014 @
eCPR Report - 04_01_2014 @
eCPR Report - 04_04_2014 @
Open report

This report displays a summary of the most important parameters during CPR training. It will show the session details and objectives, and the session results.


Gaumard® e-CPR Training Report
SESSION
OBJECTIVES
RESULTS
33%
33%

Access the Menu Bar of the report to open or print a report.

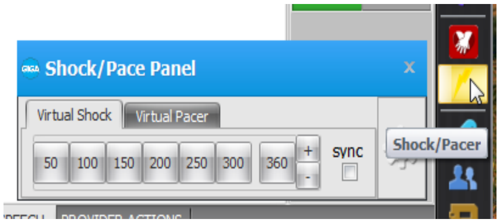
Reports are saved automatically in the computer Program files: C:\Program Files\Gaumard Scientific\CPR Trainer\eCPR Reports.


Save As
Organize
New folder
Cover Sheets
Customer Input
Images
Labels for Shows
Luis
Mailing - From shows
Noelle
Obsolete Items
Omni
PDF Manuals
Trouble Shooting
File name: e-CPR Report - john
Save as type: Native Format (*.prmi)
Save
Cancel
Hide Folders
Interruption Duration
00:32
Ventilation Duration Average
0.57
Effective Compressions
33%
Effective Ventilations
33%

Shock/Pace Panel

The shock panel is a floating window used to apply electrical therapy to the patient virtually. Go to Scenarios section for more information on how to work with the “auto responses” feature and the virtual shock panel.

Click the lightning icon to open the “Shock/Pace” panel.

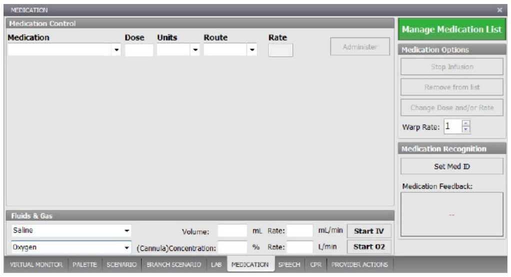

Shock/Pace Panel
Virtual Shock
Virtual Pacer
50
100
150
200
250
300
360
+
-
sync
Shock/Pacer

Medication (Auto Mode)

The Medication tab is exclusive to the automatic operating mode. Use the medication controls to simulate the physiological effects and reactions of medications administered to the patient model. To simulate the effects of a medication, the UNI software processes the drug’s properties, dosage, and interactions, and then adjusts the patient vital signs accordingly.

The Meds Profile includes a library of preprogrammed drugs. The built in drug editor allows facilitators to stay current with new medications or make changes to the properties of the existing drugs. All of the preprogrammed drugs included in the Med Profile library are found in the 2008 Handbook of Emergency

Cardiovascular Care published by the American Heart Association.


MEDICATION
Medication Control
Medication
Dose
Units
Route
Rate
Administer
Manage Medication List
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Medication Recognition
Set Med ID
Medication Feedback:
Fluids & Gas
Volume:
mL
Rate:
mL/min
Start IV
(Cannula)Concentration:
%
Rate:
L/min
Start 02
VIRTUAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LAB
MEDICATION
SPEECH
CPR
PROVIDER ACTIONS

Warp Rate: 1

Saline

Oxygen

ADMINISTERING MEDICATIONS

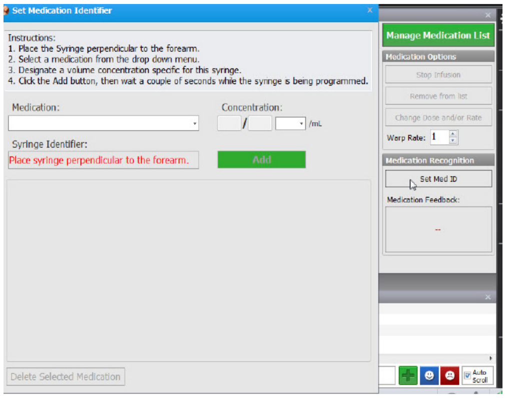
Follow this guide to administer a medication virtually from the medication tab. Alternatively, go to section "Working with the Simulator" for information on how to administer medications using the drug recognition arm.

SET MED ID

The "Set Med Id" menu is accessible when the software detects the Drug Recognition Arm on the simulator. Use the Set Med ID menu to program the tagged syringes with a medication type and a concentration.

To program a tagged syringe with a medication and a volume:

1. Click the Set Med ID option from Medication Page or from the Menu/Setup.


Set Medication Identifier
Medication:
Concentration:
/mL
Syringe Identifier:
Add
Delete Selected Medication
Manage Medication List
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Medication Recognition
Set Med ID
Medication Feedback:
Auto Scroll

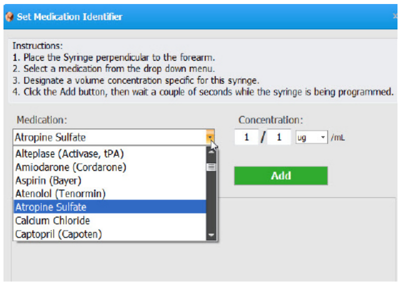
Instructions:
1. Place the Syringe perpendicular to the forearm.
2. Select a medication from the drop down menu.
3. Designate a volume concentration specific for this syringe.
4. Click the Add button, then wait a couple of seconds while the syringe is being programmed.

Place syringe perpendicular to the forearm.

Warp Rate: 1

The "Set Medication Identifier" dialog box is displayed.

2. Rotate the lower right arm so the palm of the hand is facing up, and place the syringe holder on the simulator's wrist
3. Place the syringe without the needle in the holder. The syringe must be perpendicular to the surface of the forearm
4. Select the drug from the drop-down menu and enter the concentration.


Set Medication Identifier
Medication:
Concentration:
Alteplase (Activase, tPA)
Amiodarone (Cordarone)
Aspirin (Bayer)
Atenolol (Tenormin)
Atropine Sulfate
Calcium Chloride
Captopril (Capoten)
Add

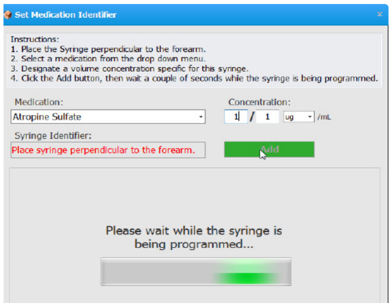
Instructions:
1. Place the Syringe perpendicular to the forearm.
2. Select a medication from the drop down menu.
3. Designate a volume concentration specific for this syringe.
4. Click the Add button, then wait a couple of seconds while the syringe is being programmed.

Medication: Atropine Sulfate

Concentration: 1 / 1 ug /mL

The Syringe Identifier displays "Ready!" when the syringe is detected.

5. Click "Add" to program the syringe


Set Medication Identifier
Add

Instructions:
1. Place the Syringe perpendicular to the forearm.
2. Select a medication from the drop down menu.
3. Designate a volume concentration specific for this syringe.
4. Click the Add button, then wait a couple of seconds while the syringe is being programmed.

Medication: Atropine Sulfate

Concentration: 1 / 1 ug /mL

Syringe Identifier: Place syringe perpendicular to the forearm.

Please wait while the syringe is being programmed...

The programmed medication is now listed on the medication list

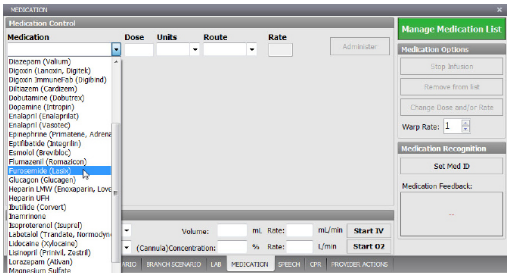
6. Write the medication name and concentration on the label provided and adhere it to the programmed syringe

Repeat procedure to program additional tagged syringes with different medications

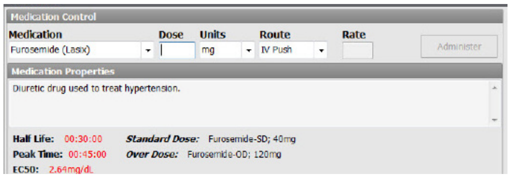
VIRTUAL MEDICATION

To administer a medication from the Medication tab:

1. Select the medication from the Drug drop down menu.


MEDICATION
Medication Control
Medication
Dose
Units
Route
Rate
Administer
Diazepam (Valium)
Digoxin (Lanoxin, Digitek)
Digoxin ImmuneFab (Digibind)
Diltiazem (Cardizem)
Dobutamine (Dobutrex)
Dopamine (Intropin)
Enalapril (Enalaprilat)
Enalapril (Vasotec)
Epinephrine (Primatene, Adrena
Eptifibatide (Integrilin)
Esmolol (Brevibloc)
Flumazenil (Romazicon)
Furosemide (Lasix)
Glucagon (Glucagen)
Heparin LMW (Enoxaparin, Love
Heparin UFH
Ibutilide (Corvert)
Inamrinone
Isoproterenol (Isuprel)
Labetalol (Trandate, Normodyn
Lidocaine (Xylocaine)
Lisinopril (Prinivil, Zestril)
Lorazepam (Ativan)
Magnesium Sulfate
Manage Medication List
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Warp Rate: 1
Medication Recognition
Set Med ID
Medication Feedback:
Volume:
mL
Rate:
mL/min
Start IV
(Cannula)Concentration:
%
L/min
Start O2
ARIO
BRANCH SCENARIO
LAB
MEDICATION
SPEECH
CPR
PROVIDER ACTIONS

A brief description is displayed at the top of the window. The half-life, peak time and drug concentration values are listed in addition to the standard and over dose dosage.


Medication Control
Medication
Dose
Units
Route
Rate
Administer
Medication Properties

Furosemide (Lasix) | mg | IV Push

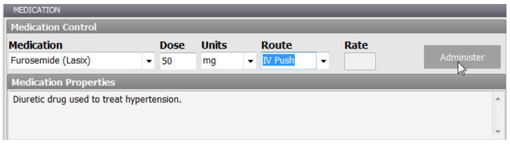
Diuretic drug used to treat hypertension.

Half Life: 00:30:00 ***Standard Dose:*** Furosemide-SD; 40mg

Peak Time: 00:45:00 ***Over Dose:*** Furosemide-OD; 120mg

EC50: 2.64mg/dL

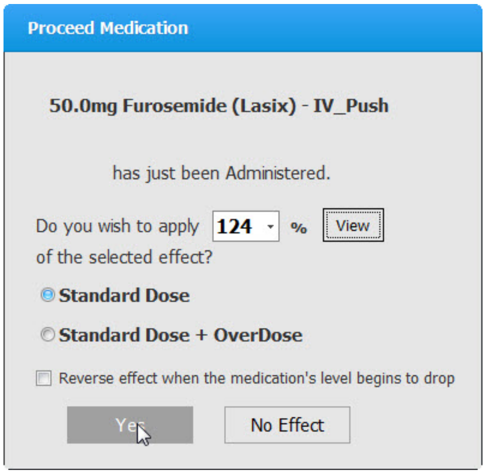
2. Enter the dose, units, route and rate (if applicable), and click "Administer".


MEDICATION
Medication Control
Medication
Dose
Units
Route
Rate
Administer
Medication Properties

Furosemide (Lasix) | 50 | mg | IV Push

Diuretic drug used to treat hypertension.

3. The "Proceed Drug" window prompts to confirm the dosage effects before applying them. Adjust the peak effect percentage and/or the dosage effect, and then click "Yes" to apply the effects


Proceed Medication
View
Yes
No Effect

50.0mg Furosemide (Lasix) - IV_Push

has just been Administered.

Do you wish to apply 124 % of the selected effect?

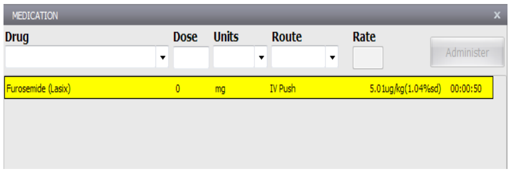
● **Standard Dose**

○ **Standard Dose + OverDose**

☐ Reverse effect when the medication's level begins to drop

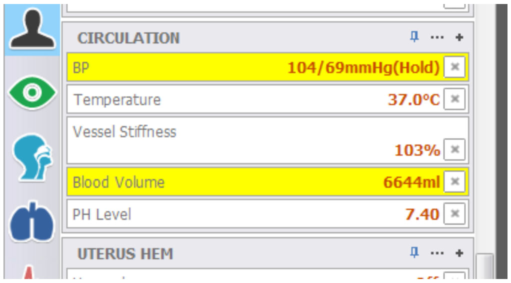
To turn off the Proceed Drug prompt, click Setup>Auto Responses and change the Drug Model Effect settings to "Auto".

The administered drug panel displays information on dosage rate, does administered, and total time of administration.


MEDICATION
Drug
Dose
Units
Route
Rate
Administer

Furosemide (Lasix) 0 mg IV Push 5.01ug/kg(1.04%sd) 00:00:50

The Auto mode adjusts the patient's vital signs to simulate the effects of the drug automatically.


CIRCULATION
UTERUS HEM

BP 104/69mmHg(Hold)

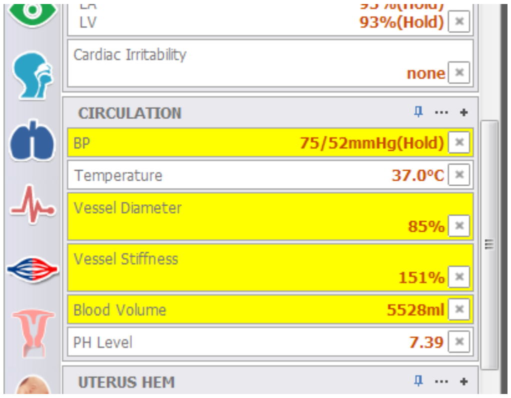
Temperature 37.0°C

Vessel Stiffness 103%

Blood Volume 6644ml

PH Level 7.40

The blood pressure continues to decrease in response to the medication's properties.


CIRCULATION
UTERUS HEM

LV 93%(Hold)

Cardiac Irritability none

BP 75/52mmHg(Hold)

Temperature 37.0°C

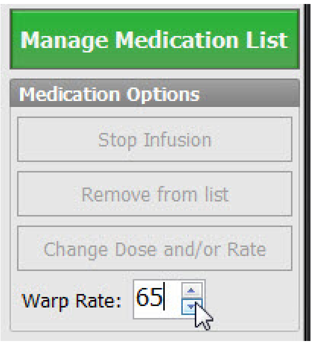
Vessel Diameter 85%

Vessel Stiffness 151%

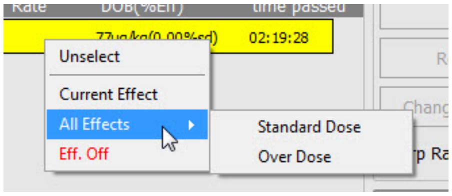
Blood Volume 5528ml

PH Level 7.39

4. Increase the “Warp Rate” to speed up the effect of a medication on the patient model.


Manage Medication List
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Warp Rate: 65

5. Right click on the drug entry to access additional options.

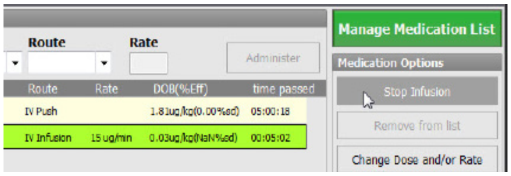

Rate
DOB(%Eff)
time passed
77ug/kg(0.00%sd)
02:19:28
Unselect
Current Effect
All Effects
Eff. Off
Standard Dose
Over Dose

Select from the following options.

- Unselect - Unselect a highlighted drug
- Current Effects - View the effect on the patient’s vital signs
- All effects - View all the available programmed drug effects for this medication
- Drug effect toggle -Turn the drug effects on the patient model on or off

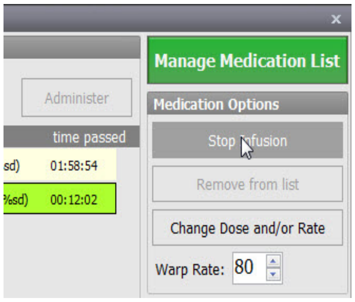
REMOVING A MEDICATION

Drugs cannot be removed from the list during the administration process with the exception of IV infusions. To stop an IV infusion before it is finished, highlight the medication from the list, and click stop.

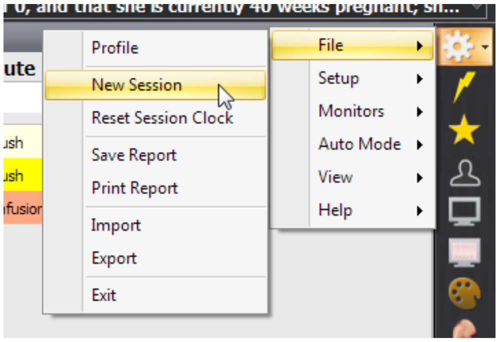

Route
Rate
Administer
Manage Medication List
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Route
Rate
DOB(%Eff)
time passed

Route	Rate	DOB(%Eff)	time passed
IV Push		1.81ug/kg(0.00%sd)	05:00:18
IV Infusion	15 ug/min	0.03ug/kg(NaN%sd)	00:05:02

After the dose administration is complete, select the drug and click “Remove from list”.

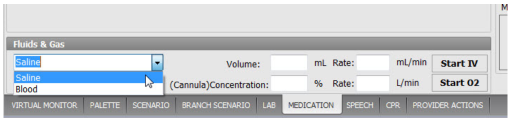

Administer
time passed
sd)
01:58:54
%sd)
00:12:02
Manage Medication List
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Warp Rate: 80

To remove all the medications from the list and reset the effects on the patient model, click “File > New Session”.

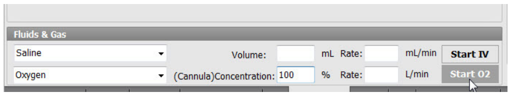

Profile
New Session
Reset Session Clock
Save Report
Print Report
Import
Export
Exit
File
Setup
Monitors
Auto Mode
View
Help

FLUID & GAS

The automatic mode can process the administration of gas and/or fluids to the patient model.

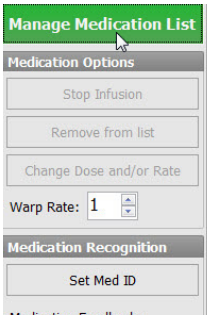

Fluids & Gas
Saline
Saline
Blood
Volume:
mL
Rate:
mL/min
Start IV
(Cannula)Concentration:
%
Rate:
L/min
Start O2
VIRTUAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LAB
MEDICATION
SPEECH
CPR
PROVIDER ACTIONS

Select from saline, blood, or oxygen and the volume/concentration and rate. Click on “Start” to administer.

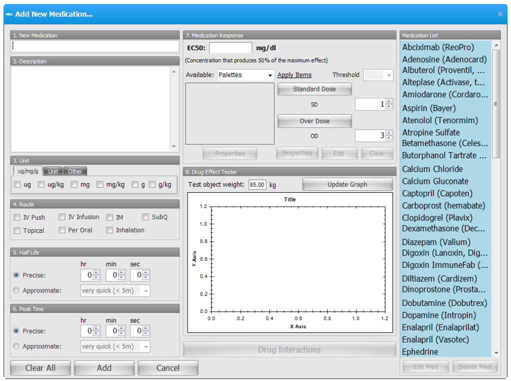

Fluids & Gas
Saline
Volume:
mL
Rate:
mL/min
Start IV
Oxygen
(Cannula)Concentration:
%
Rate:
L/min
Start O2
(Cannula)Concentration: 100

DRUG LIST MANAGER

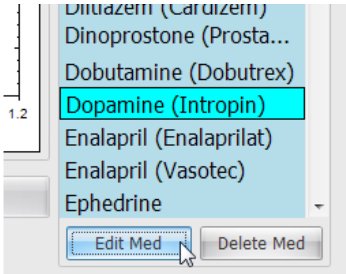
Click the “Manage Drug List” button to open the “Add New Medication…” manager.


Manage Medication List
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Warp Rate: 1
Medication Recognition
Set Med ID

Use the “Add New Medication” manager to add new medications, edit medication properties, update existing items, and program medication interactions.


Add New Medication...
1. New Medication
2. Description
3. Unit
ug/mg/g
Unit
Other
ug
ug/kg
mg
mg/kg
g
g/kg
4. Route
IV Push
IV Infusion
IM
SubQ
Topical
Per Oral
Inhalation
5. Half Life
hr
min
sec
Precise:
Approximate:
very quick (< 5m)
6. Peak Time
Clear All
Add
Cancel
7. Medication Response
EC50:
mg/dl
(Concentration that produces 50% of the maximum effect)
Available:
Palettes
Apply Items
Threshold
Standard Dose
SD
Over Dose
OD
Properties
Edit
Clear
8. Drug Effect Tester
Test object weight:
85.00
kg
Update Graph
Title
Y Axis
X Axis
Drug Interactions
Medication List
Abciximab (ReoPro)
Adenosine (Adenocard)
Albuterol (Proventil, ...
Alteplase (Activase, t...
Amiodarone (Cordaro...
Aspirin (Bayer)
Atenolol (Tenormin)
Atropine Sulfate
Betamethasone (Celes...
Butorphanol Tartrate ...
Calcium Chloride
Calcium Gluconate
Captopril (Capoten)
Carboprost (hemabate)
Clopidogrel (Plavix)
Dexamethasone (Dec...
Diazepam (Valium)
Digoxin (Lanoxin, Dig...
Digoxin ImmuneFab (...
Diltiazem (Cardizem)
Dinoprostone (Prosta...
Dobutamine (Dobutrex)
Dopamine (Intropin)
Enalapril (Enalaprilat)
Enalapril (Vasotec)
Ephedrine
Edit Med
Delete Med

Select a medication from the Medication List and click “edit” to view it’s properties.


Diltiazem (Cardizem)
Dinoprostone (Prosta...
Dobutamine (Dobutrex)
Dopamine (Intropin)
Enalapril (Enalaprilat)
Enalapril (Vasotec)
Ephedrine
1.2
Edit Med
Delete Med

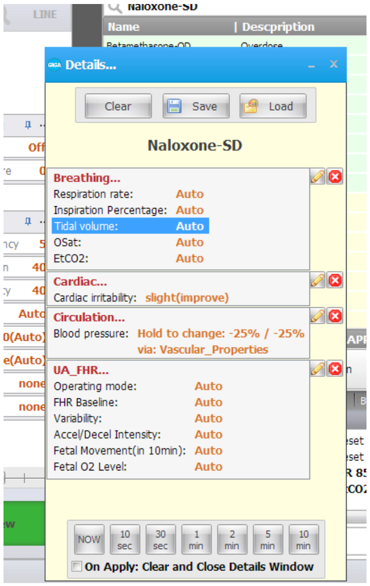
CREATING NEW MEDICATIONS

Each medication is programmed with two palette items. One palette item is programmed with the vital signs adjustments to simulate the effects of a standard dose (SD), and the other palette item is programmed with the effects of an over dose (OD). Additional information such as half-life, peak time, and route is also programmed into the medication properties.

When the medication is administered to the patient, the software applies the palette item associated with the dose threshold. The Auto Mode adjusts the vital signs changed by the palette item gradually to simulate the medication’s effect on the patient.

To create a new medication:

1. Create a palette item using details page for the effects of a standard dose (SD). Then, repeat the process to create a palette item for the effects of an over dose (OD). For general information on creating a palette items, please go to section “Palettes”


Naloxone-SD
Name
Descpription
Betamethasone-OD
Overdose
Details...
Clear
Save
Load
NOW
10 sec
30 sec
1 min
2 min
5 min
10 min

Naloxone-SD

Breathing...
Respiration rate: Auto
Inspiration Percentage: Auto
Tidal volume: Auto
OSat: Auto
EtCO2: Auto

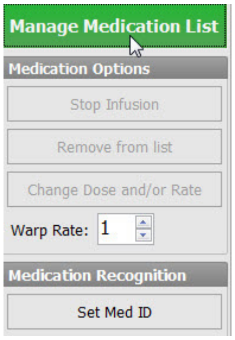
Cardiac...
Cardiac irritability: slight(improve)

Circulation...
Blood pressure: Hold to change: -25% / -25% via: Vascular_Properties

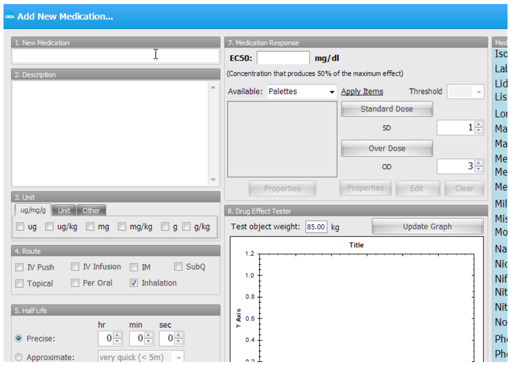
UA_FHR...
Operating mode: Auto
FHR Baseline: Auto
Variability: Auto
Accel/Decel Intensity: Auto
Fetal Movement(in 10min): Auto
Fetal O2 Level: Auto

☐ On Apply: Clear and Close Details Window

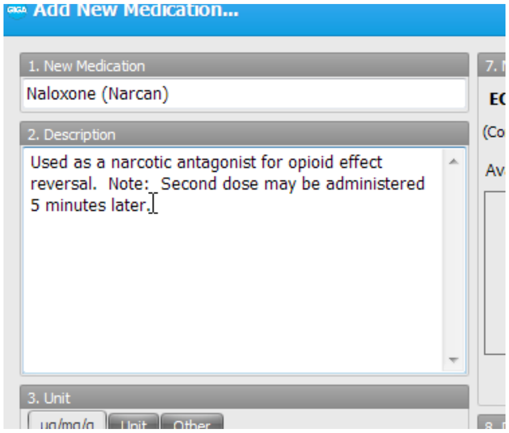
2. After dose effect palettes are created using the Details controls, go to the drug tab and click the “Manage Drug List” button.


Manage Medication List
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Warp Rate: 1
Medication Recognition
Set Med ID

The Add New Medication window is displayed.


Add New Medication...
1. New Medication
2. Description
3. Unit
4. Route
5. Half Life
7. Medication Response
8. Drug Effect Tester

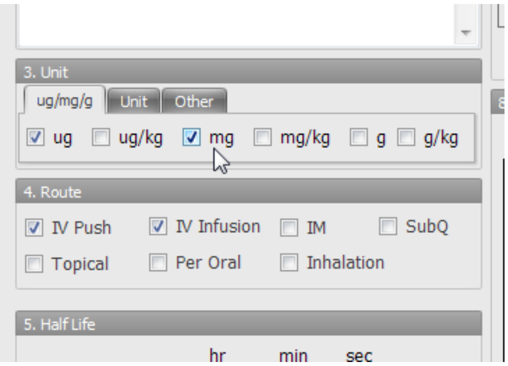
3. Type the name of the new medication (e.g. Generic Name (Brand Name)) and enter the medication's description and the dosage information


Add New Medication...
3. Unit
ug/mg/g
Unit
Other

1. New Medication
Naloxone (Narcan)

2. Description
Used as a narcotic antagonist for opioid effect reversal. Note: Second dose may be administered 5 minutes later.

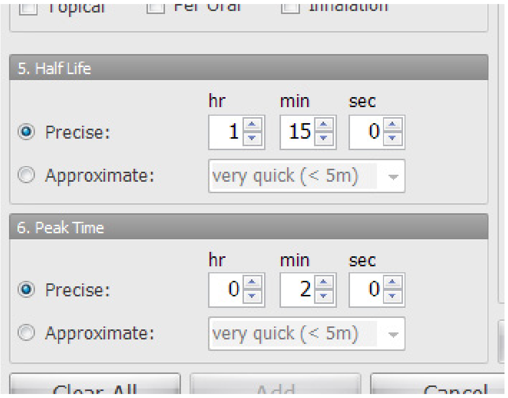
4. Select the units and the administration route.


ug/mg/g
Unit
Other
5. Half Life
hr
min
sec

3. Unit
☑ ug ☐ ug/kg ☑ mg ☐ mg/kg ☐ g ☐ g/kg

4. Route
☑ IV Push ☑ IV Infusion ☐ IM ☐ SubQ
☐ Topical ☐ Per Oral ☐ Inhalation

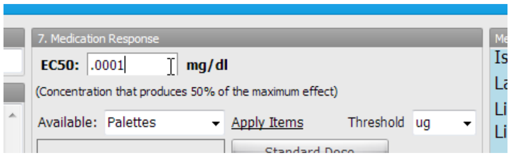
5. Enter the drug's Half Life and Peak time.


Topical
Per Oral
Inhalation
Clear All
Add
Cancel

5. Half Life
● Precise: 1 hr 15 min 0 sec
○ Approximate: very quick (< 5m)

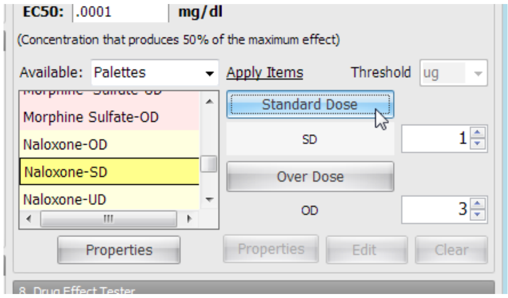
6. Peak Time
● Precise: 0 hr 2 min 0 sec
○ Approximate: very quick (< 5m)

6. Enter half-maximal effective concentration.


Available:
Palettes
Apply Items
Threshold
ug
Standard Dose

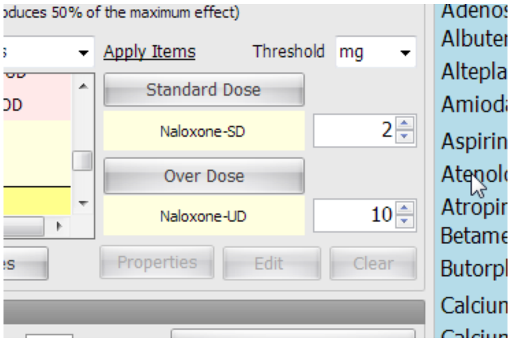
7. Medication Response
EC50: .0001 mg/dl
(Concentration that produces 50% of the maximum effect)

7. Select the standard dose (SD) effect palette created earlier and then click the applicable dosage button to assign it to the threshold. Repeat this step to assign the over dose (OD) effect palette to the Over Dose threshold.


Available:
Palettes
Apply Items
Threshold
ug
Morphine Sulfate-OD
Naloxone-OD
Naloxone-SD
Naloxone-UD
Standard Dose
Over Dose
Properties
Edit
Clear
8. Drug Effect Tester

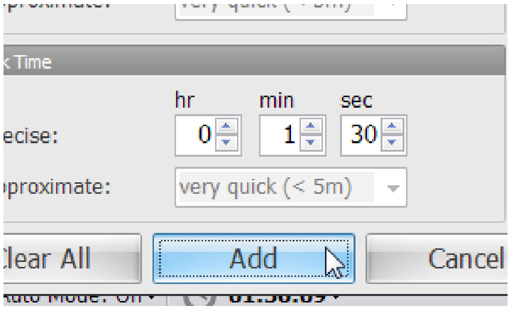
EC50: .0001 mg/dl
(Concentration that produces 50% of the maximum effect)
SD 1
OD 3

8. Select the threshold unit and set the dosage amount that will trigger the programmed palette effect.


Apply Items
Standard Dose
Over Dose
Properties
Edit
Clear
Adenos
Albuter
Altepla
Amioda
Aspirin
Atenolo
Atropir
Betame
Butorpl
Calcium

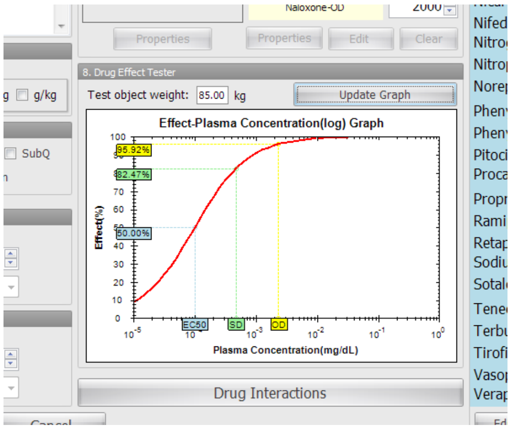
Threshold mg
Naloxone-SD 2
Naloxone-UD 10

9. Click “Add” to save the new medication to the Medication List library.


Time
hr
min
sec
ecise:
0
1
30
pproximate:
very quick (< 5m)
lear All
Add
Cancel

DRUG EFFECT TESTER

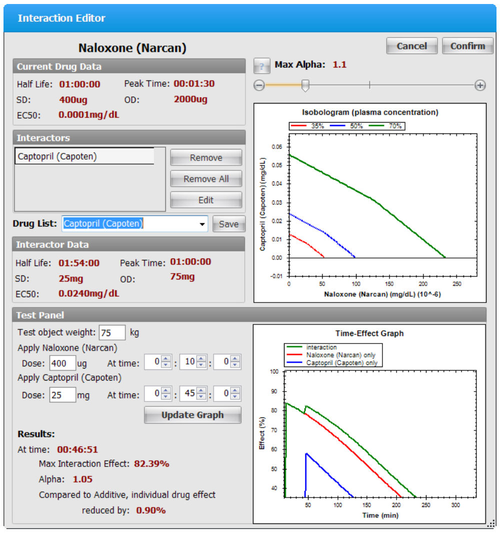
After configuring the drug properties using the “Add New Medication...” menu, click the “Update Graph” button to generate the effect-plasma concentration results. Continue to the next section to program interactors for this drug.


Naloxone-OD
2000
Properties
Properties
Edit
Clear
8. Drug Effect Tester
g/kg
SubQ
Update Graph
Effect-Plasma Concentration(log) Graph
Effect(%)
95.92%
82.47%
50.00%
100
70
60
40
30
20
10
0
EC50
SD
OD
Plasma Concentration(mg/dL)
Drug Interactions
Nifed
Nitro
Nitro
Nore
Phen
Phen
Pitoc
Proca
Propr
Rami
Retap
Sodiu
Sotal
Tene
Terbu
Tirofi
Vaso
Verap

Test object weight: 85.00 kg

DRUG INTERACTION EDITOR

Use the “Interaction Editor” window to program drug interactions. When two or more medications preprogrammed to interact are administered, the physiologic model will adjust vital signs to simulate interaction effect.


Interaction Editor
Cancel
Confirm
Remove
Remove All
Edit
Save
Update Graph
Isobologram (plasma concentration)
35%
50%
70%
Captopril (Capoten) (mg/dL)
Naloxone (Narcan) (mg/dL) (10^-6)
Time-Effect Graph
interaction
Naloxone (Narcan) only
Captopril (Capoten) only
Effect (%)
Time (min)

Naloxone (Narcan)

Max Alpha: 1.1

Current Drug Data

Half Life: 01:00:00 Peak Time: 00:01:30
SD: 400ug OD: 2000ug
EC50: 0.0001mg/dL

Interactors

Captopril (Capoten)

Drug List: Captopril (Capoten)

Interactor Data

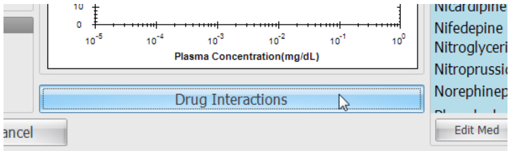
Half Life: 01:54:00 Peak Time: 01:00:00
SD: 25mg OD: 75mg
EC50: 0.0240mg/dL

Test Panel

Test object weight: 75 kg
Apply Naloxone (Narcan)
Dose: 400 ug At time: 0 : 10 : 0
Apply Captopril (Capoten)
Dose: 25 mg At time: 0 : 45 : 0

Results:
At time: 00:46:51
Max Interaction Effect: 82.39%
Alpha: 1.05
Compared to Additive, individual drug effect reduced by: 0.90%

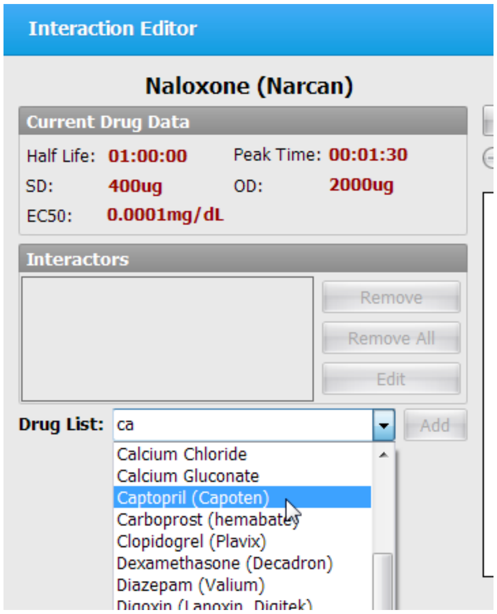
Click “Drug Interactions” on the “Add New Medication…” window to open the Drug Interaction editor.


Plasma Concentration(mg/dL)
Drug Interactions
ancel
Nifedepine
Nitroglyceri
Nitroprussi
Norephinep
Edit Med

PROGRAMMING INTERACTORS

To program one or more medications to interact with the current drug:

1. Select the interactor from the drug list click "Add":



Interaction Editor

Naloxone (Narcan)

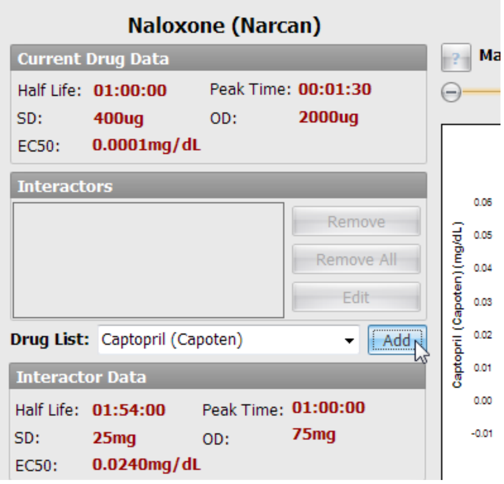
Current Drug Data
Half Life: 01:00:00 Peak Time: 00:01:30
SD: 400ug OD: 2000ug
EC50: 0.0001mg/dL

Interactors

Drug List: ca

Remove
Remove All
Edit
Add
Calcium Chloride
Calcium Gluconate
Captopril (Capoten)
Carboprost (hemabate)
Clopidogrel (Plavix)
Dexamethasone (Decadron)
Diazepam (Valium)
Digoxin (Lanoxin, Digitek)

Information about the interactor drug is displayed in the Interactor Data window.



Naloxone (Narcan)

Current Drug Data
Half Life: 01:00:00 Peak Time: 00:01:30
SD: 400ug OD: 2000ug
EC50: 0.0001mg/dL

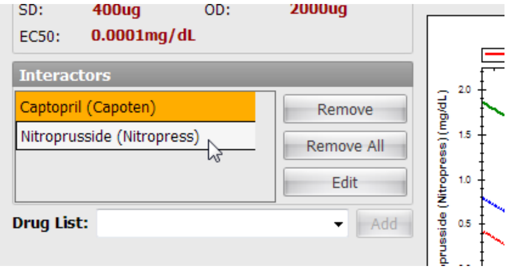
Interactors

Drug List: Captopril (Capoten)

Interactor Data
Half Life: 01:54:00 Peak Time: 01:00:00
SD: 25mg OD: 75mg
EC50: 0.0240mg/dL

Remove
Remove All
Edit
Add
Ma
Captopril (Capoten) (mg/dL)
0.06
0.05
0.04
0.03
0.02
0.01
0.00
-0.01

2. The drug is included into the interactors list. Repeat the process to add more drugs to the interactors list if necessary.



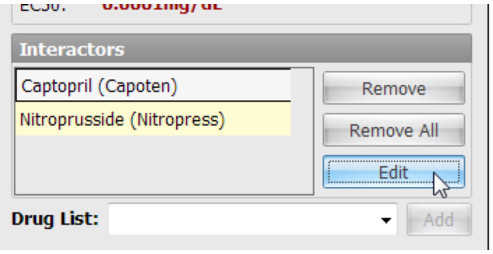
SD: 400ug OD: 2000ug
EC50: 0.0001mg/dL

Interactors
Captopril (Capoten)
Nitroprusside (Nitropress)

Drug List:

Remove
Remove All
Edit
Add
prusside (Nitropress) (mg/dL)
2.0
1.5
1.0
0.5

3. Select the interactor and click "Edit"



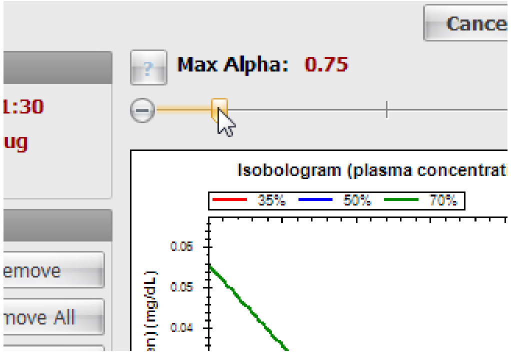
Interactors
Captopril (Capoten)
Nitroprusside (Nitropress)

Drug List:

EC50: 0.0001mg/dL
Remove
Remove All
Edit
Add

4. Adjust the Max Alpha to modify the type of interactivity effect. Monitor the graph for a visual model of the plasma concentration.

- Alpha = 1: Additive
- Alpha < 1: Synergistic/Induction
- Alpha > 1: Antagonistic/Inhibition

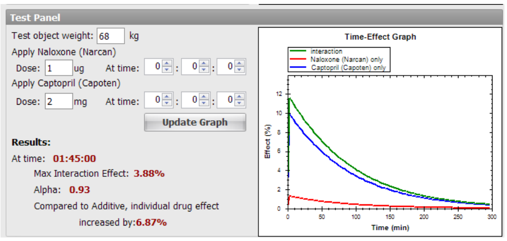


Max Alpha: 0.75

Cance
1:30
ug
emove
move All
?
Isobologram (plasma concentrat
35%
50%
70%
0.06
0.05
0.04
n) (mg/dL)

TEST PANEL

Use the test panel to simulate the interaction between the drugs based on dosage and time of administration.



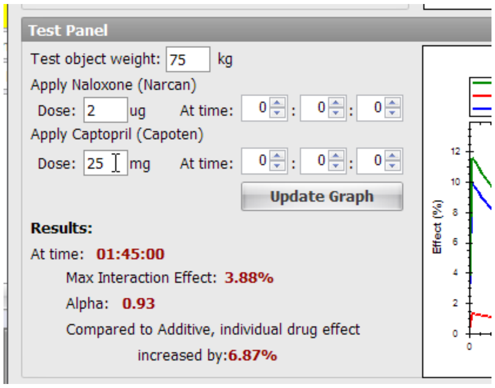
Test Panel
Test object weight: 68 kg
Apply Naloxone (Narcan)
Dose: 1 ug At time: 0 : 0 : 0
Apply Captopril (Capoten)
Dose: 2 mg At time: 0 : 0 : 0

Results:
At time: 01:45:00
Max Interaction Effect: 3.88%
Alpha: 0.93
Compared to Additive, individual drug effect increased by:6.87%

Update Graph
Time-Effect Graph
interaction
Naloxone (Narcan) only
Captopril (Capoten) only
Effect (%)
0
2
4
6
8
10
12
Time (min)
0
50
100
150
200
250
300

To simulate the medications interactivity using the test panel:

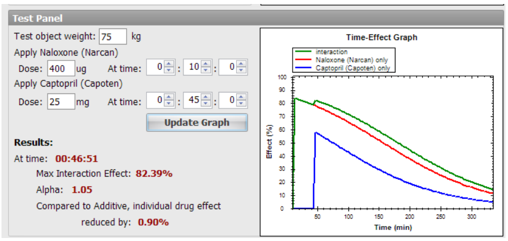
1. Enter the patient's weight and the dose for each drug.


Test Panel
Update Graph
Effect (%)
12
10
8
6
4
2
0
0

Test object weight: 75 kg
Apply Naloxone (Narcan)
Dose: 2 ug At time: 0 : 0 : 0
Apply Captopril (Capoten)
Dose: 25 mg At time: 0 : 0 : 0

Results:
At time: 01:45:00
Max Interaction Effect: 3.88%
Alpha: 0.93
Compared to Additive, individual drug effect increased by:6.87%

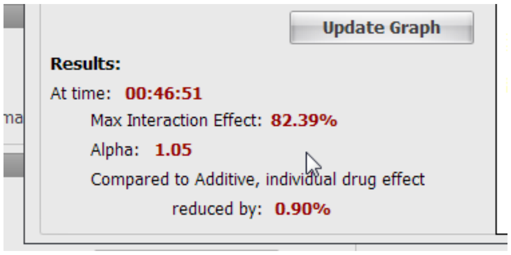
2. Enter the time of administration for each drug and click "Update Graph".


Test Panel
Update Graph
Time-Effect Graph
interaction
Naloxone (Narcan) only
Captopril (Capoten) only
Effect (%)
100
90
80
70
60
50
40
30
20
10
0
50
100
150
200
250
300
Time (min)

Test object weight: 75 kg
Apply Naloxone (Narcan)
Dose: 400 ug At time: 0 : 10 : 0
Apply Captopril (Capoten)
Dose: 25 mg At time: 0 : 45 : 0

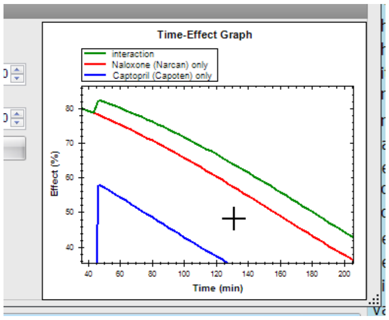
Results:
At time: 00:46:51
Max Interaction Effect: 82.39%
Alpha: 1.05
Compared to Additive, individual drug effect reduced by: 0.90%

The results indicate that the maximum interaction effect (82.39 %) occurs at 00:46:51. The alpha at that point is 1.01 and the drug effect for each drug is reduced by 0.90%. Fine-tune the Max Alpha control and retest if the drug interaction effect is not realistic.

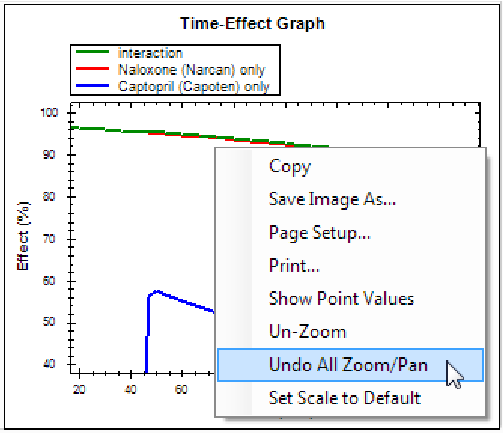

Update Graph

Results:
At time: 00:46:51
Max Interaction Effect: 82.39%
Alpha: 1.05
Compared to Additive, individual drug effect reduced by: 0.90%

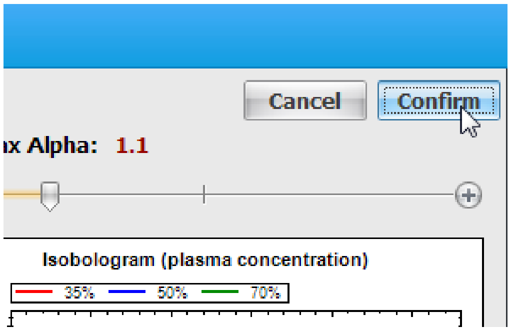
A time-effect graph is generated from the test results. Tap and hold to draw a zoom area.


Time-Effect Graph
interaction
Naloxone (Narcan) only
Captopril (Capoten) only
Effect (%)
80
70
60
50
40
40
60
80
100
120
140
160
180
200
Time (min)

3. Right click anywhere on the graph access the zoon and print options.

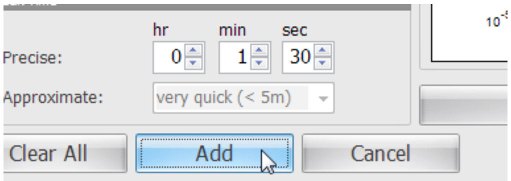

Time-Effect Graph
interaction
Naloxone (Narcan) only
Captopril (Capoten) only
Effect (%)
100
90
80
70
60
50
40
20
40
60
Copy
Save Image As...
Page Setup...
Print...
Show Point Values
Un-Zoom
Undo All Zoom/Pan
Set Scale to Default

4. Click "Confirm" to save the settings.


Cancel
Confirm
Isobologram (plasma concentration)
35%
50%
70%

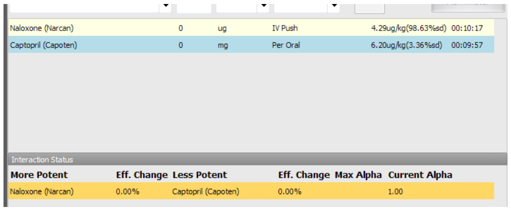
x Alpha: 1.1

5. Review all the properties of the new medication in the "Add New Medication…" window, and click "Add" to save the new changes.


Clear All
Add
Cancel

Precise: hr 0 min 1 sec 30
Approximate: very quick (< 5m)

In the example below, two drugs preprogrammed to interact have been administered. The interaction information is listed in the Interaction Status panel.



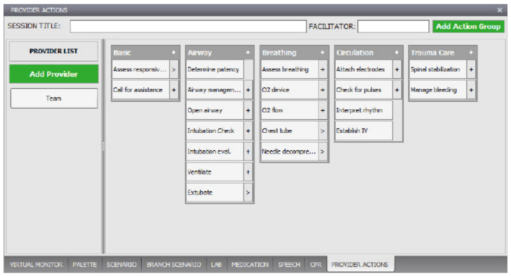
Naloxone (Narcan)	0	ug	IV Push	4.29ug/kg(98.63%sd)	00:10:17
Captopril (Capoten)	0	mg	Per Oral	6.20ug/kg(3.36%sd)	00:09:57

Interaction Status

More Potent	Eff. Change	Less Potent	Eff. Change	Max Alpha	Current Alpha
Naloxone (Narcan)	0.00%	Captopril (Capoten)	0.00%		1.00

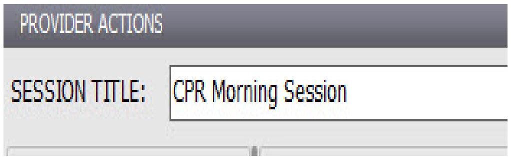
Provider Actions

Use the Provider Actions tab to track actions performed by the provider manually. Each option on the Provider menu generates a time stamped entry in the text log below.

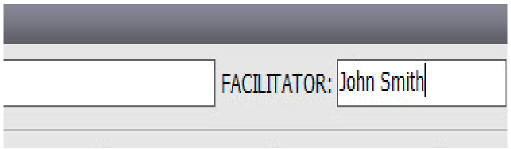

PROVIDER ACTIONS
SESSION TITLE:
FACILITATOR:
Add Action Group
PROVIDER LIST
Add Provider
Team
Basic
Airway
Breathing
Circulation
Trauma Care
Assess responsiv...
Call for assistance
Determine patency
Airway managem...
Open airway
Intubation Check
Intubation eval.
Ventilate
Extubate
Assess breathing
O2 device
O2 flow
Chest tube
Needle decompre...
Attach electrodes
Check for pulses
Interpret rhythm
Establish IV
Spinal stabilization
Manage bleeding
VIRTUAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LAB
MEDICATION
SPEECH
CPR
PROVIDER ACTIONS

SESSION INFORMATION

Enter the session tile information and the name of the facilitator at the start of the session. The information is included in the final log report.


PROVIDER ACTIONS

SESSION TITLE: CPR Morning Session



FACILITATOR: John Smith

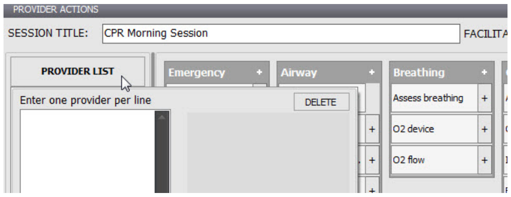
TEAM LOGGING

The team logging feature is used to track the individual actions of up to 19 providers manually. The feature records the name of the provider with the action as an event entry in the log.

Provider names can be entered individually or a provider list can be created:

To create a provider list to the "Provider Actions":

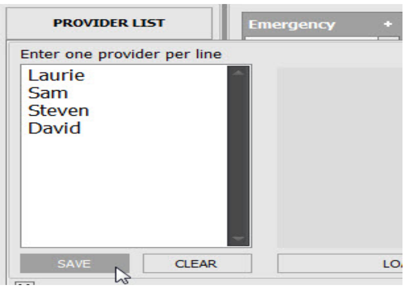
1. Click "Provider List" button to add a new provider.


PROVIDER ACTIONS
PROVIDER LIST
Emergency
Airway
Breathing
DELETE
Assess breathing
O2 device
O2 flow

SESSION TITLE: CPR Morning Session

Enter one provider per line

2. Enter one provider per line and click "save" to generate the list.

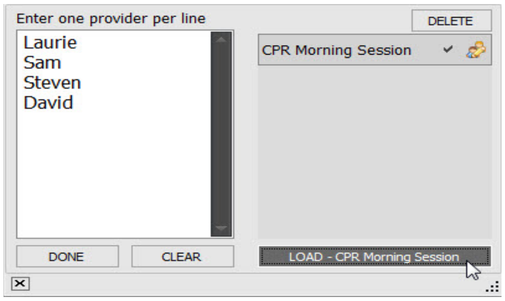

PROVIDER LIST
Emergency
SAVE
CLEAR

Enter one provider per line

Laurie
Sam
Steven
David

The provider list will be available in the right column under the session title.

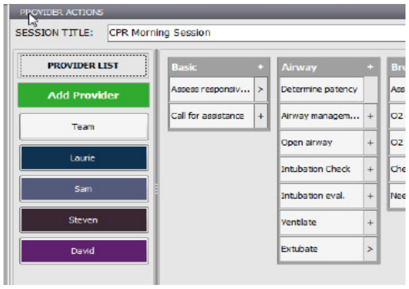
3. Select the session listed and click "load"


DELETE
CPR Morning Session
DONE
CLEAR
LOAD - CPR Morning Session

Enter one provider per line

Laurie
Sam
Steven
David

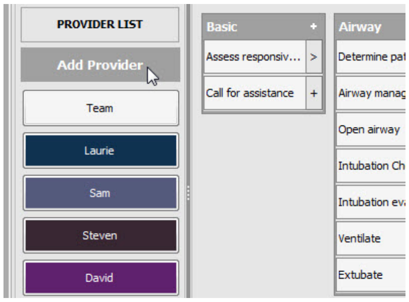
The provider names are now added to log tab.


PROVIDER ACTIONS
PROVIDER LIST
Add Provider
Team
Laurie
Sam
Steven
David
Basic
Airway
Assess responsiv...
Call for assistance
Determine patency
Airway managem...
Open airway
Intubation Check
Intubation eval.
Ventilate
Extubate

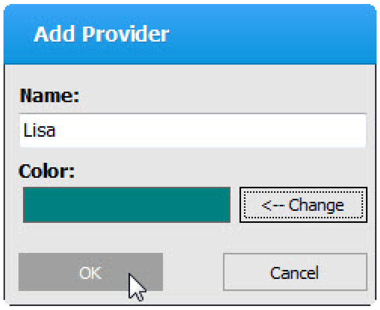
SESSION TITLE: CPR Morning Session

To add a new provider independently to the "Provider Actions" window:

1. Click "Add Provider" button to add a new provider.


PROVIDER LIST
Add Provider
Team
Laurie
Sam
Steven
David
Basic
Assess responsiv...
Call for assistance
Airway
Determine pat
Airway manag
Open airway
Intubation Ch
Intubation ev
Ventilate
Extubate

2. Enter the provider's name and select a color tag. Click OK to save the provider.



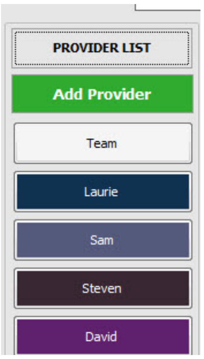
Add Provider

Name: Lisa

Color:

<-- Change
OK
Cancel

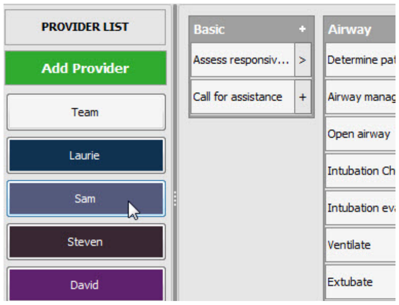
3. The provider is now added to the log tab. Repeat the steps to add up to 19 different providers.



PROVIDER LIST
Add Provider
Team
Laurie
Sam
Steven
David

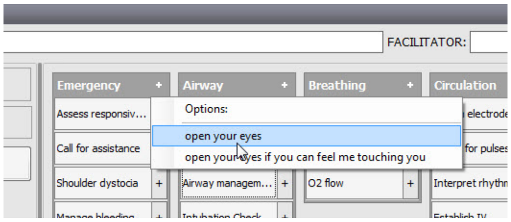
TRACKING PROVIDER ACTIONS

Provider actions can be tracked as a team or individually. Click the provider's name to set the provider as active and track the actions individually.



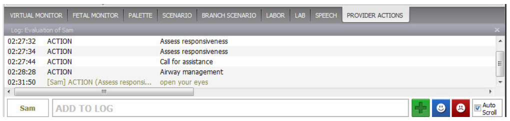
PROVIDER LIST
Add Provider
Team
Laurie
Sam
Steven
David
Basic
Assess responsiv...
Call for assistance
Airway
Determine pat
Airway manag
Open airway
Intubation Ch
Intubation ev
Ventilate
Extubate

Click the appropriate option to track the action. For example, if the provider assesses the patient's responsiveness by requesting them to open their eyes, click the "Assess responsiveness" button and select "Open your eyes".



FACILITATOR:
Emergency
Airway
Breathing
Circulation
Assess responsiv...
Call for assistance
Shoulder dystocia
Manage bleeding
Options:
open your eyes
open your eyes if you can feel me touching you
Airway managem...
Intubation Check
O2 flow
electrode
for pulses
Interpret rhythm
Establish IV

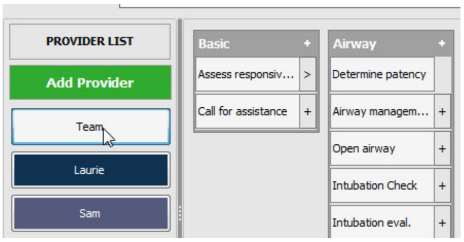
The following log entry is generated with the name of the active provider who performed the action:



VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS
Log: Evaluation of Sam
Sam
ADD TO LOG
Auto Scroll

```
02:27:32   ACTION                          Assess responsiveness
02:27:34   ACTION                          Assess responsiveness
02:27:44   ACTION                          Call for assistance
02:28:28   ACTION                          Airway management
02:31:50   [Sam] ACTION (Assess responsi... open your eyes
```

Click the "Team" button to deactivate the active provider and return to general logging. Right click the provider button to delete or rename a provider.

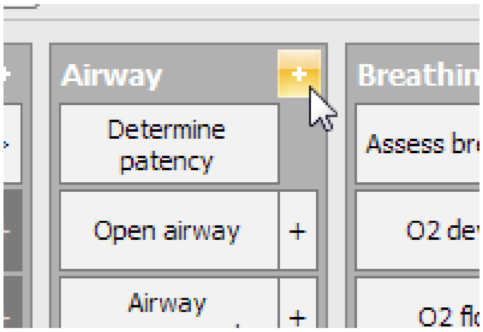


PROVIDER LIST
Add Provider
Team
Laurie
Sam
Basic
Assess responsiv...
Call for assistance
Airway
Determine patency
Airway managem...
Open airway
Intubation Check
Intubation eval.

CREATING NEW PROVIDER ACTION BUTTONS

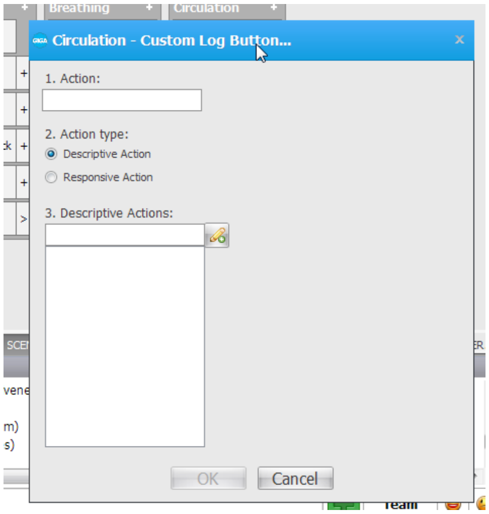
Create new clickable provider action buttons to expand the library of actions. To add a new action to an existing category:

1. Click the + button on the category



Airway
Breathin
Determine patency
Open airway
Airway
Assess br
O2 de
O2 fl

2. The category menu is displayed



Circulation - Custom Log Button...

1. Action:

2. Action type:

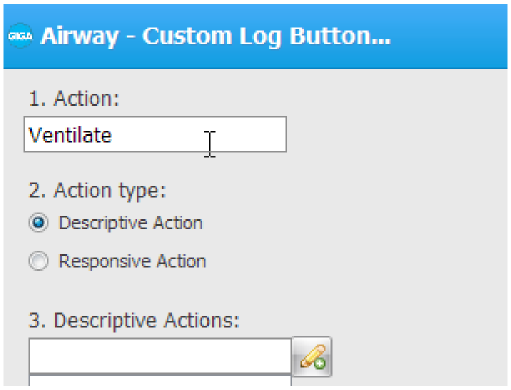
● Descriptive Action

○ Responsive Action

3. Descriptive Actions:

Breathing
Circulation
OK
Cancel

3. Enter the name of the action and select the type of action



Airway - Custom Log Button...

1. Action: Ventilate

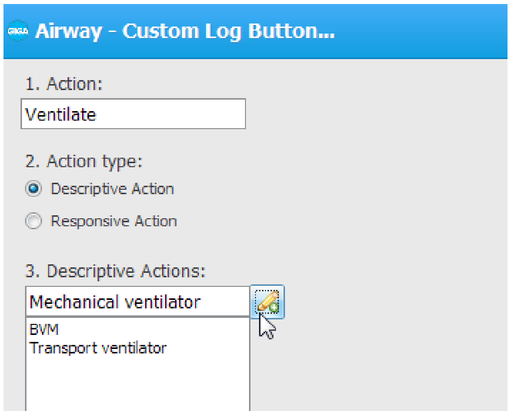
2. Action type:

● Descriptive Action

○ Responsive Action

3. Descriptive Actions:

4. Enter a description for the possible action and click + to add. Repeat the process to add several actions.



Airway - Custom Log Button...

1. Action: Ventilate

2. Action type:

● Descriptive Action

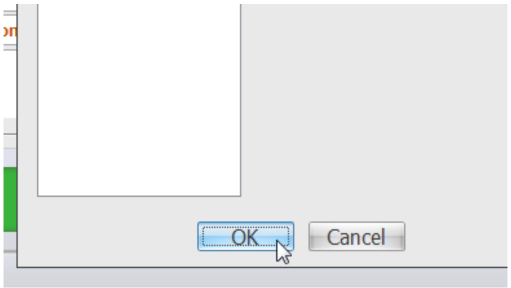
○ Responsive Action

3. Descriptive Actions: Mechanical ventilator

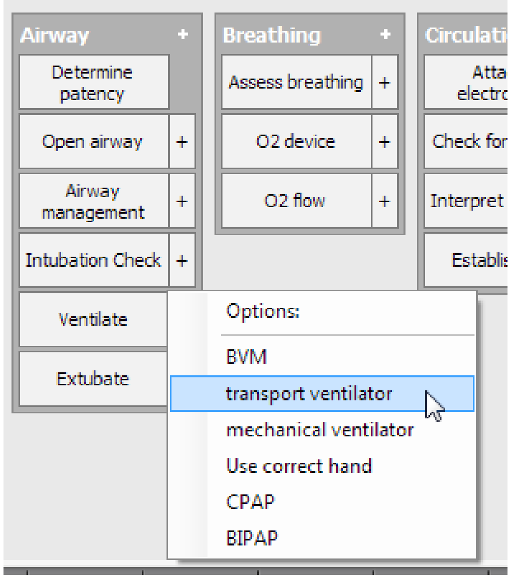
BVM

Transport ventilator

5. Click OK to save



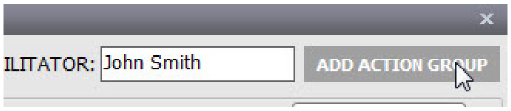
The new action is listed in the airway category.



Airway
Determine patency
Open airway
Airway management
Intubation Check
Ventilate
Extubate
Breathing
Assess breathing
O2 device
O2 flow
Circulati
Options:
BVM
transport ventilator
mechanical ventilator
Use correct hand
CPAP
BIPAP

To create a new Action Group:

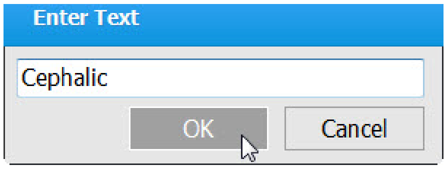
1. Click “Add Action Group” button



ILITATOR: John Smith

ADD ACTION GROUP

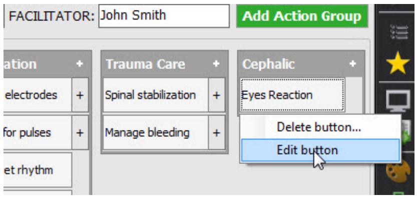
2. Enter a name and click “OK”



Enter Text

Cephalic

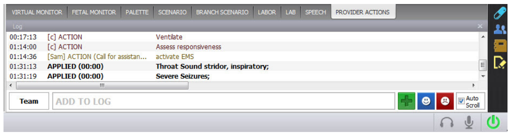
The new action group is now listed. Use right click to edit or remove the new category


FACILITATOR: John Smith
Add Action Group
ation
Trauma Care
Cephalic
electrodes
Spinal stabilization
Eyes Reaction
for pulses
Manage bleeding
Delete button...
Edit button
et rhythm

Event Log

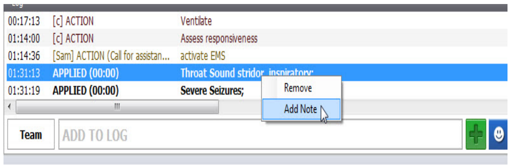
The event log records a time stamped entry of events that occur during the simulation session. It addition, every individual entry records a snapshot of the vital signs parameters when the event occurred. The text log records the following events:

- Vital sign changes applied manually or made by scenario
- Events detected by onboard sensors (e.g. intubation sensor, defibrillation sites)
- Preprogrammed speech phrases
- Satisfactory or unsatisfactory evaluation
- Facilitator notes


VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS
Log
Team
ADD TO LOG
Auto Scroll

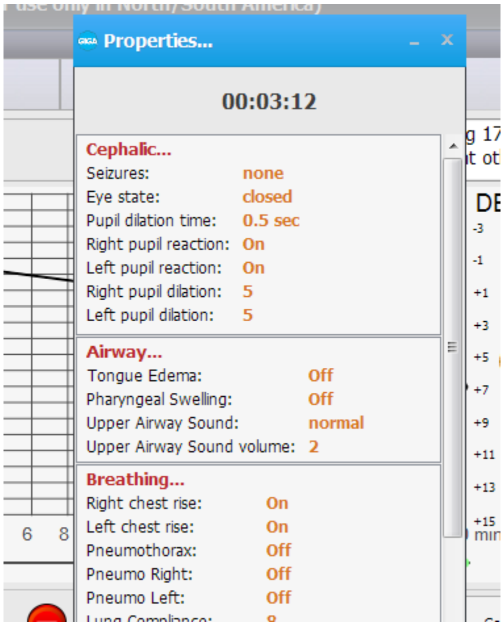
```
00:17:13   [c] ACTION                        Ventilate
01:14:00   [c] ACTION                        Assess responsiveness
01:14:36   [Sam] ACTION (Call for assistan...  activate EMS
01:31:13   APPLIED (00:00)                   Throat Sound stridor, inspiratory;
01:31:19   APPLIED (00:00)                   Severe Seizures;
```

Select an entry from the list and right click to view additional options.


Remove
Add Note
Team
ADD TO LOG

```
00:17:13   [c] ACTION                        Ventilate
01:14:00   [c] ACTION                        Assess responsiveness
01:14:36   [Sam] ACTION (Call for assistan...  activate EMS
01:31:13   APPLIED (00:00)                   Throat Sound stridor, inspiratory;
01:31:19   APPLIED (00:00)                   Severe Seizures;
```

Select "patient vital signs" options to view a snapshot of the vital signs values when the event occurred.


Properties...

00:03:12

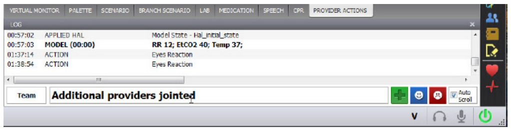
Cephalic...
Seizures: none
Eye state: closed
Pupil dilation time: 0.5 sec
Right pupil reaction: On
Left pupil reaction: On
Right pupil dilation: 5
Left pupil dilation: 5

Airway...
Tongue Edema: Off
Pharyngeal Swelling: Off
Upper Airway Sound: normal
Upper Airway Sound volume: 2

Breathing...
Right chest rise: On
Left chest rise: On
Pneumothorax: Off
Pneumo Right: Off
Pneumo Left: Off

ADDING NOTES

Enter notes into the "add to log" field to record notes manually. The information is categorized in the log as "NOTE".

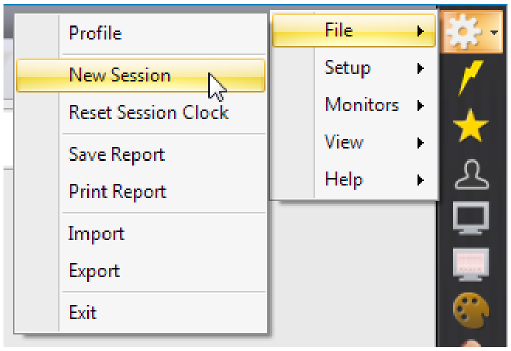

VIRTUAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LAB
MEDICATION
SPEECH
CPR
PROVIDER ACTIONS
LOG
Team
Auto Scroll
V

```
00:57:02   APPLIED HAL        Model State - Hal_initial_state
00:57:03   MODEL (00:00)      RR 12; EtCO2 40; Temp 37;
01:37:14   ACTION             Eyes Reaction
01:38:54   ACTION             Eyes Reaction
```

Additional providers jointed

CREATING A NEW SESSION LOG

The log event "time stamps" reference the UNI session clock. At the start of a new simulation exercise, click File>New Session to reset the session clock 00:00:00, reset any vital parameters settings, and clear all the event entries.


Profile
New Session
Reset Session Clock
Save Report
Print Report
Import
Export
Exit
File
Setup
Monitors
View
Help

SAVING THE LOG INFORMATION

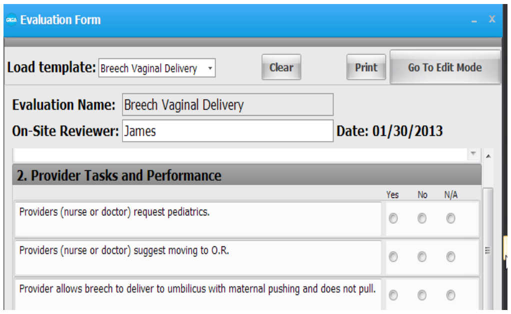
The log information is recorded in a rich text format. Export the log information to save a detailed history of the events that occurred during the session.

To save the session log report as a text file:

1. Click FILE>Save report
2. Enter a name for the report
3. Select the desired name and path, and click “Save”.

Evaluation Form

The evaluation tool assists facilitators in reporting and assessing provider interaction using a questionnaire form. A completed evaluation form can then be stored as a digital document or printed for distribution.


Evaluation Form
Clear
Print
Go To Edit Mode
2. Provider Tasks and Performance

Load template: Breech Vaginal Delivery

Evaluation Name: Breech Vaginal Delivery

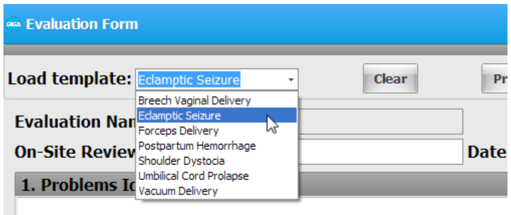
On-Site Reviewer: James **Date: 01/30/2013**

	Yes	No	N/A
Providers (nurse or doctor) request pediatrics.	○	○	○
Providers (nurse or doctor) suggest moving to O.R.	○	○	○
Provider allows breech to deliver to umbilicus with maternal pushing and does not pull.	○	○	○

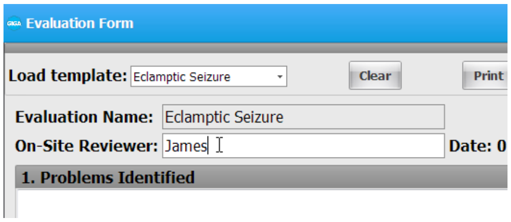
USING BUILT-IN EVALUATION FORM TEMPLATES

Several preprogrammed evaluation templates included in the UNI software. Each template includes a set of multiple-choice questions, fill in the blank, and true or false questions for a variety of scenarios.

Select an evaluation template from the “Load template” drop down to begin.


Evaluation Form
Load template:
Eclamptic Seizure
Breech Vaginal Delivery
Eclamptic Seizure
Forceps Delivery
Postpartum Hemorrhage
Shoulder Dystocia
Umbilical Cord Prolapse
Vacuum Delivery
Clear
Pr
Evaluation Nan
On-Site Reviev
Date
1. Problems Id

Enter the name of the facilitator administering the evaluation in On-Site Reviewer field.

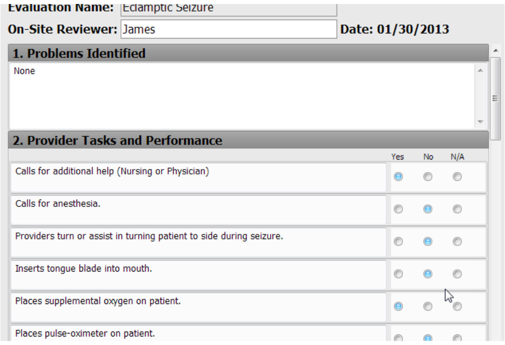

Evaluation Form
Clear
Print
1. Problems Identified

Load template: Eclamptic Seizure

Evaluation Name: Eclamptic Seizure

On-Site Reviewer: James **Date: 0**

Complete the form by answering each question.


1. Problems Identified
2. Provider Tasks and Performance

Evaluation Name: Eclamptic Seizure

On-Site Reviewer: James **Date: 01/30/2013**

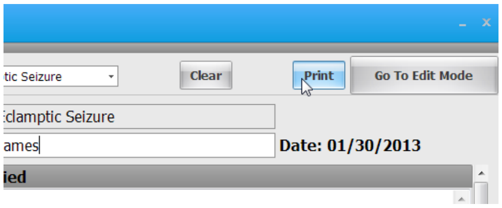
1. Problems Identified

None

2. Provider Tasks and Performance

	Yes	No	N/A
Calls for additional help (Nursing or Physician)	●	○	○
Calls for anesthesia.	○	●	○
Providers turn or assist in turning patient to side during seizure.	○	●	○
Inserts tongue blade into mouth.	○	●	○
Places supplemental oxygen on patient.	●	○	○
Places pulse-oximeter on patient.	○	●	○

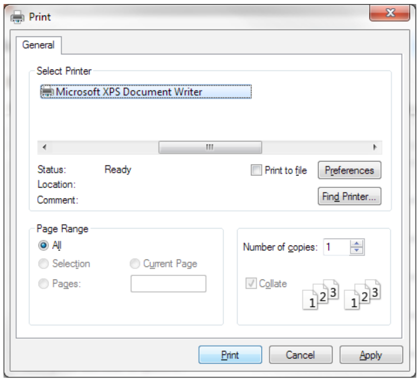
Click “Print” at the top right corner of the screen once the evaluation is completed.


tic Seizure
Clear
Print
Go To Edit Mode
ied

clamptic Seizure

ames **Date: 01/30/2013**

Select the Microsoft XPS Document writer to save the finished evaluation as digital document. Click “Print” to save the digital copy in the system.


Print
General
Select Printer
Preferences
Find Printer...
Page Range
Print
Cancel
Apply

Microsoft XPS Document Writer

Status: Ready

Location:

Comment:

☐ Print to file

● All

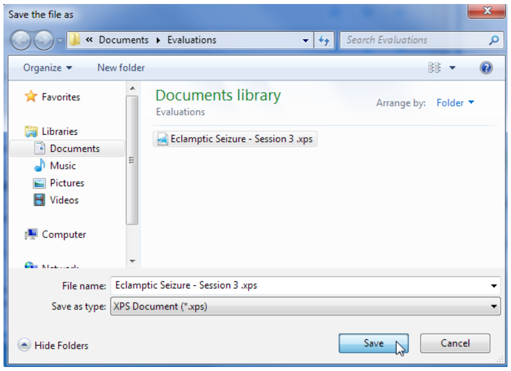
○ Selection ○ Current Page

○ Pages:

Number of copies: 1

☑ Collate

Enter a name for the evaluation and click “Save”.

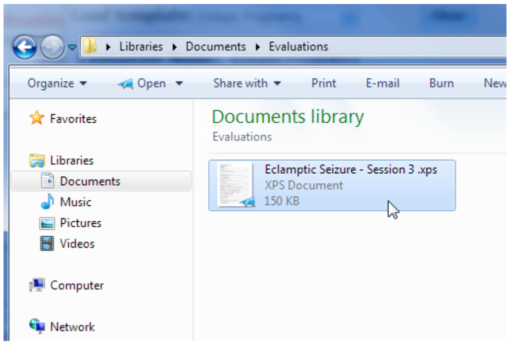

Save the file as
Documents ▸ Evaluations
Search Evaluations
Organize
New folder
Favorites
Libraries
Documents
Music
Pictures
Videos
Computer
Documents library
Evaluations
Arrange by: Folder
Eclamptic Seizure - Session 3 .xps
Hide Folders
Save
Cancel

File name: Eclamptic Seizure - Session 3 .xps

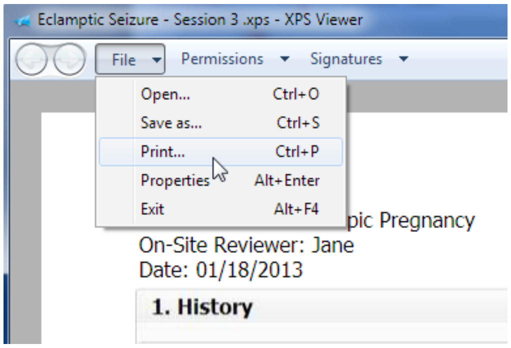
Save as type: XPS Document (*.xps)

PRINTING AN EVALUATION

If the PC is connected to a printer, select and open the evaluation document saved in the previous step.

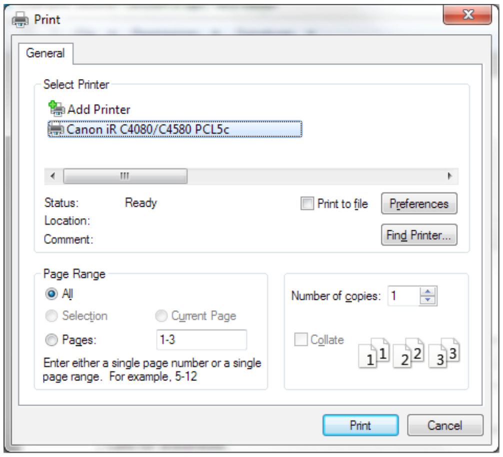

Libraries ▸ Documents ▸ Evaluations
Organize
Open
Share with
Print
E-mail
Burn
New
Favorites
Libraries
Documents
Music
Pictures
Videos
Computer
Network
Documents library
Evaluations
Eclamptic Seizure - Session 3 .xps
XPS Document
150 KB

Navigate to the XPS Viewer file menu and select “Print”.


Eclamptic Seizure - Session 3 .xps - XPS Viewer
File
Permissions
Signatures
Open... Ctrl+O
Save as... Ctrl+S
Print... Ctrl+P
Properties Alt+Enter
Exit Alt+F4

pic Pregnancy
On-Site Reviewer: Jane
Date: 01/18/2013
1. History

Select the printer device from the list box and click print.


Print
General
Select Printer
Add Printer
Print to file
Preferences
Find Printer...
Page Range
Selection
Current Page
Collate
Print
Cancel

Canon iR C4080/C4580 PCL5c

Status: Ready

Location:

Comment:

● All

○ Pages: 1-3

Enter either a single page number or a single page range. For example, 5-12

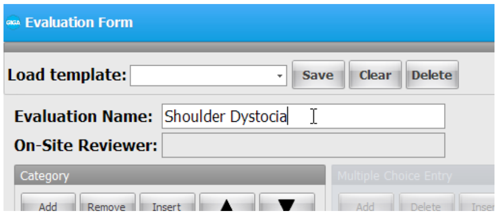
Number of copies: 1

It is recommended that documents be first saved as XPS files before being printed into hard copies.

CREATING NEW EVALUATION TEMPLATES

Create new evaluation templates for new scenarios using the edit mode. To enter the edit mode, toggle the “Go To button” located on the top right of the evaluation form window.

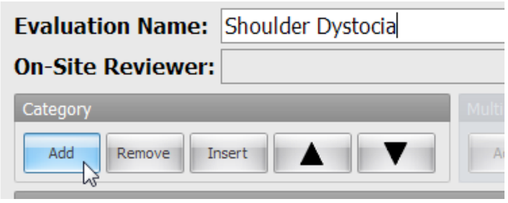
Enter a name for the new evaluation template in the “Evaluation Name” field.


Evaluation Form
Load template:
Save
Clear
Delete
Category
Add
Remove
Insert
▲
▼
Multiple Choice Entry
Add
Delete
Inser

Evaluation Name: Shoulder Dystocia

On-Site Reviewer:

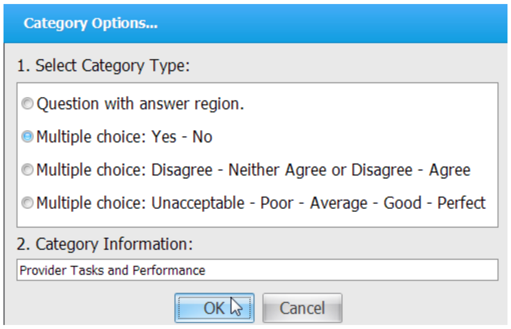
Click “Add” on the Category menu.


Category
Add
Remove
Insert
▲
▼
Multi
A

Evaluation Name: Shoulder Dystocia

On-Site Reviewer:

Select the category type and enter the category title. Click OK to save.



Category Options...

1. Select Category Type:

○ Question with answer region.

● Multiple choice: Yes - No

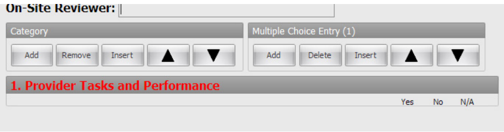
○ Multiple choice: Disagree - Neither Agree or Disagree - Agree

○ Multiple choice: Unacceptable - Poor - Average - Good - Perfect

2. Category Information:

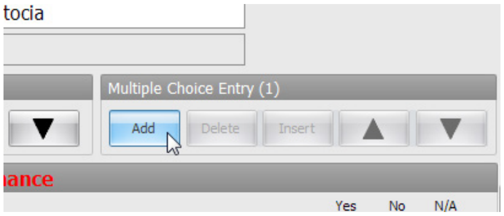
Provider Tasks and Performance

The new category is now created.



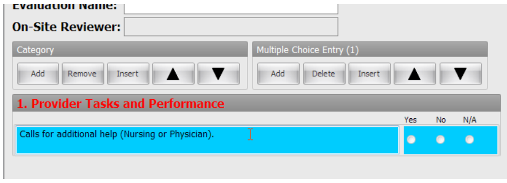
On-Site Reviewer:
Category
Add
Remove
Insert
Multiple Choice Entry (1)
Add
Delete
Insert
1. Provider Tasks and Performance
Yes
No
N/A

Highlight the new category and then click “Add” on the “Multiple Choice Entry” menu.



tocia
Multiple Choice Entry (1)
Add
Delete
Insert
ance
Yes
No
N/A

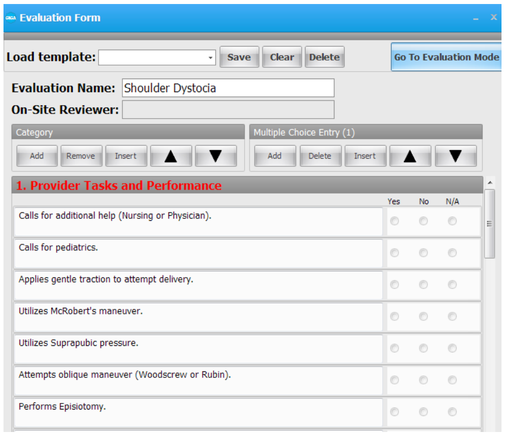
Type the evaluation statement in the new multiple choice field.



Evaluation Name:
On-Site Reviewer:
Category
Add
Remove
Insert
Multiple Choice Entry (1)
Add
Delete
Insert
1. Provider Tasks and Performance
Yes
No
N/A

Calls for additional help (Nursing or Physician).

Repeat the previous steps to add more categories, questions, and multiple-choice options.



Evaluation Form
Load template:
Save
Clear
Delete
Go To Evaluation Mode
Category
Add
Remove
Insert
Multiple Choice Entry (1)
Add
Delete
Insert
Yes
No
N/A

Evaluation Name: Shoulder Dystocia

On-Site Reviewer:

1. Provider Tasks and Performance

Calls for additional help (Nursing or Physician).

Calls for pediatrics.

Applies gentle traction to attempt delivery.

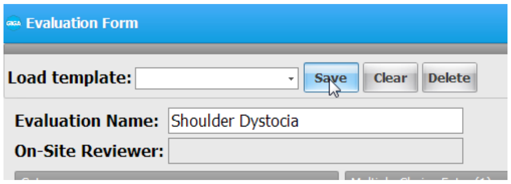
Utilizes McRobert's maneuver.

Utilizes Suprapubic pressure.

Attempts oblique maneuver (Woodscrew or Rubin).

Performs Episiotomy.

After the evaluation template design is complete, click Save at the top of the window.

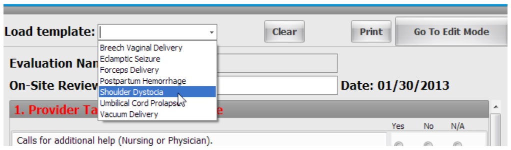


Evaluation Form
Load template:
Save
Clear
Delete

Evaluation Name: Shoulder Dystocia

On-Site Reviewer:

The evaluation form is now available for use.



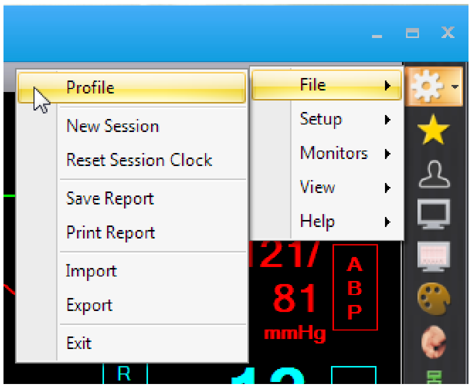
Load template:
Breech Vaginal Delivery
Eclamptic Seizure
Forceps Delivery
Postpartum Hemorrhage
Shoulder Dystocia
Umbilical Cord Prolapse
Vacuum Delivery
Clear
Print
Go To Edit Mode
Evaluation Nar
On-Site Reviev
1. Provider Ta
Yes
No
N/A

Date: 01/30/2013

Calls for additional help (Nursing or Physician).

Menu Bar

FILE



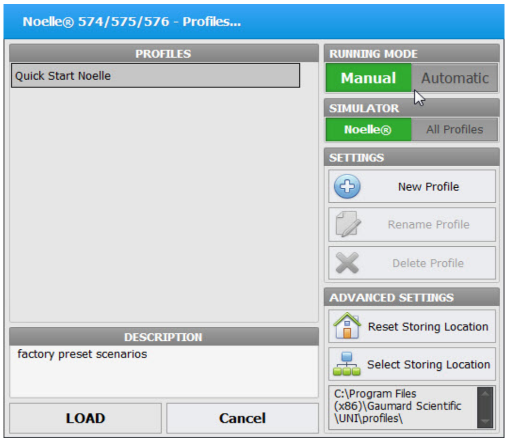
Profile
New Session
Reset Session Clock
Save Report
Print Report
Import
Export
Exit
File
Setup
Monitors
View
Help
121/
81
mmHg
A
B
P
R

PROFILE

Click the Profile menu option to open the Profiles menu. To switch to a different profile, select the operating mode and the new profile and click “Load”.

PROFILES AND OPERATING MODES

After the startup screen, the profile and operating mode selection menu is displayed.

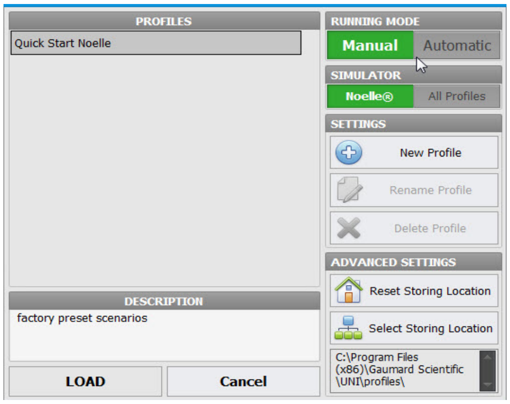

Noelle® 574/575/576 - Profiles...
PROFILES
Quick Start Noelle
RUNNING MODE
Manual
Automatic
SIMULATOR
Noelle®
All Profiles
SETTINGS
New Profile
Rename Profile
Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location
C:\Program Files (x86)\Gaumard Scientific \UNI\profiles\
DESCRIPTION
factory preset scenarios
LOAD
Cancel

The UNI control software has two modes of operation: Manual and Automatic. Each mode includes a Quick Start profile with preprogrammed scenarios exercises created in conjunction with experienced healthcare instructors and working medical professionals. Continue to the next section to learn more about each operating mode and the profiles included.

After selecting an operating mode and profile, click “Load” to continue.

MANUAL MODE

In the “Manual” operating mode, the facilitator fully controls the vital signs and physiologic responses.


PROFILES
Quick Start Noelle
RUNNING MODE
Manual
Automatic
SIMULATOR
Noelle®
All Profiles
SETTINGS
New Profile
Rename Profile
Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location
C:\Program Files (x86)\Gaumard Scientific \UNI\profiles\
DESCRIPTION
factory preset scenarios
LOAD
Cancel

The Manual mode includes the following profiles:

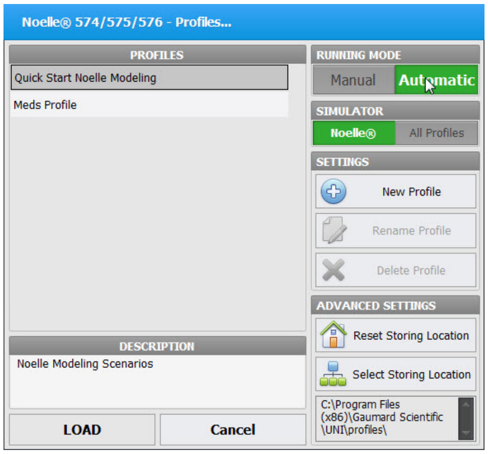
QUICK START SIMULATOR

When first starting out with the simulator, it is recommended that you use the Quick Start profile, which was created in conjunction with experienced healthcare instructors and working medical professionals.

The Quick Start profile has applicable Palettes that are useful for simulating common medical emergencies. For many applications, it serves a convenient starting point that can be customized to fit most simulation objectives. It Includes a library of predetermined scenarios.

AUTOMATIC MODE

The Automatic mode assists the facilitator by automatically adjusting vital signs in response to caregiver participation, pharmacologic intervention, and manual input. For example, when facilitator increases the heart rate, the Auto mode will calculate the response and adjust the blood pressure automatically. To activate the operating mode as an upgrade option, go to “Menu” section.


Noelle® 574/575/576 - Profiles...
PROFILES
Quick Start Noelle Modeling
Meds Profile
RUNNING MODE
Manual
Automatic
SIMULATOR
Noelle®
All Profiles
SETTINGS
New Profile
Rename Profile
Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location
C:\Program Files (x86)\Gaumard Scientific \UNI\profiles\
DESCRIPTION
Noelle Modeling Scenarios
LOAD
Cancel

The Automatic mode includes the following built-in profiles:

MEDS PROFILES

Includes a library of fifty-two pre-programmed drugs to be used on simulations.

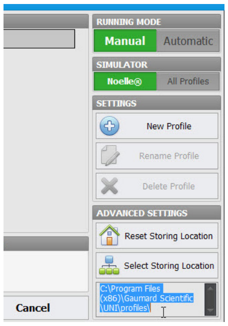
QUICK START SIMULATOR MODELING

Includes a library of predetermined scenarios.

MANAGING PROFILES

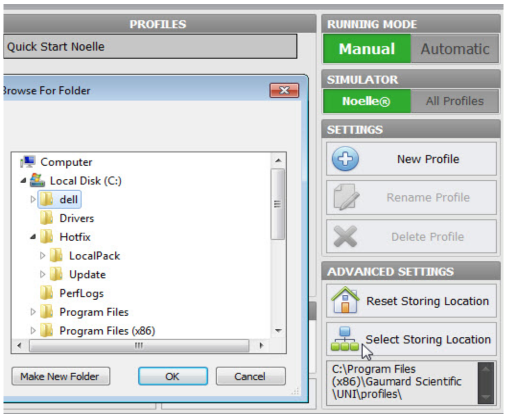
Use the Settings Menu to create a new profile and edit this profile.

Also the profile folder location will be shown below the “Select Storing Location” icon under advances settings.


RUNNING MODE
Manual
Automatic
SIMULATOR
Noelle®
All Profiles
SETTINGS
New Profile
Rename Profile
Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location
Cancel

C:\Program Files (x86)\Gaumard Scientific \UNI\profiles\

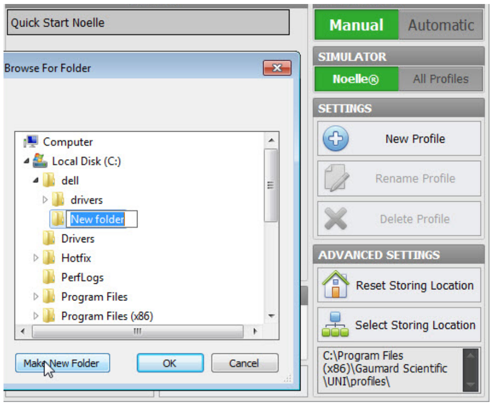
Use the “Select Storing Location“ icon to select the location of the new profile to be created on the server.


PROFILES
Browse For Folder
Computer
Local Disk (C:)
dell
Drivers
Hotfix
LocalPack
Update
PerfLogs
Program Files
Program Files (x86)
Make New Folder
OK
Cancel
RUNNING MODE
Manual
Automatic
SIMULATOR
Noelle®
All Profiles
SETTINGS
New Profile
Rename Profile
Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location

Quick Start Noelle

C:\Program Files (x86)\Gaumard Scientific \UNI\profiles\

Select the server location and click “Make New Folder” to create the profile folder.

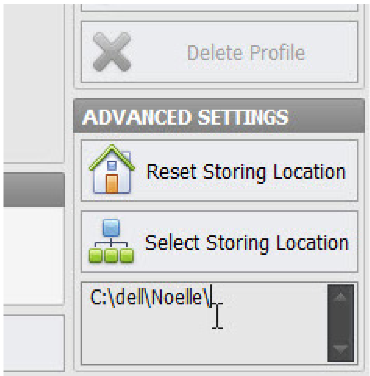

Browse For Folder
Computer
Local Disk (C:)
dell
drivers
New folder
Drivers
Hotfix
PerfLogs
Program Files
Program Files (x86)
Make New Folder
OK
Cancel
Manual
Automatic
SIMULATOR
Noelle®
All Profiles
SETTINGS
New Profile
Rename Profile
Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location

Quick Start Noelle

C:\Program Files (x86)\Gaumard Scientific \UNI\profiles\

Assign a name to the folder and click “OK”

The new profile folder location will show up. Then proceed to create a new profile, see instructions detailed below.


Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location

C:\dell\Noelle\

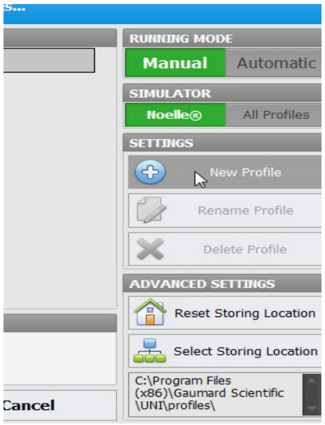
Use the “Reset Storing Location ” icon to reset to default profiles folder.

CREATING A NEW PROFILE

Profiles store palette, scenario, and option settings independently; changes made to one profile have no effect on the others. Below are some examples on how profiles are used.

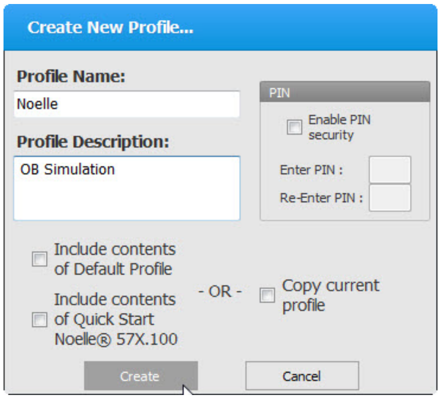
- Assign one profile to each user of your Gaumard simulator system
- Use profiles to organize and protect palettes and scenarios
- Create a profile dedicated to a specific academic course taught by multiple instructors
- Devote an entire profile to one particular subject area, or even one particular scenario

To create a new profile, click “New Profile”.


RUNNING MODE
Manual
Automatic
SIMULATOR
Noelle®
All Profiles
SETTINGS
New Profile
Rename Profile
Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location
Cancel

C:\Program Files (x86)\Gaumard Scientific \UNI\profiles\

Enter a name for the new profile followed by a description.

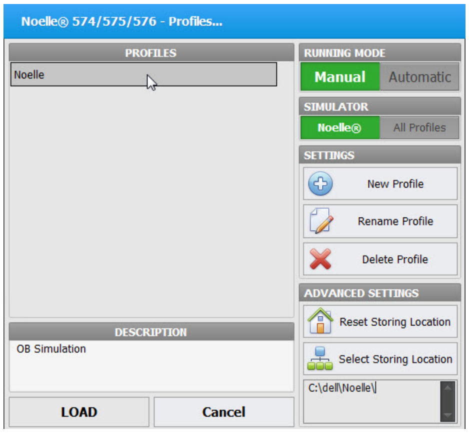

Create New Profile...
PIN
☐ Enable PIN security
Enter PIN :
Re-Enter PIN :
☐ Include contents of Default Profile
☐ Include contents of Quick Start Noelle® 57X.100
- OR -
☐ Copy current profile
Create
Cancel

Profile Name: Noelle

Profile Description: OB Simulation

Enable the PIN protection to prevent unauthorized users from accessing or making changes to this profile.

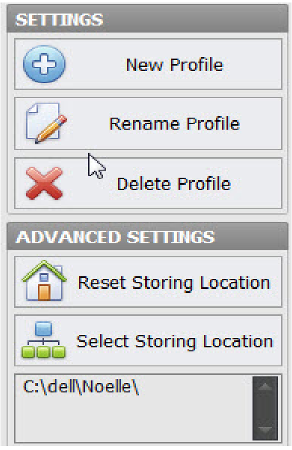
Lastly, click “Create” to save the new profile.


Noelle® 574/575/576 - Profiles...
PROFILES
Noelle
RUNNING MODE
Manual
Automatic
SIMULATOR
Noelle®
All Profiles
SETTINGS
New Profile
Rename Profile
Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location
DESCRIPTION
LOAD
Cancel

DESCRIPTION: OB Simulation

C:\dell\Noelle\

Click “Rename” or “Delete” to change the name of delete this new profile


SETTINGS
New Profile
Rename Profile
Delete Profile
ADVANCED SETTINGS
Reset Storing Location
Select Storing Location

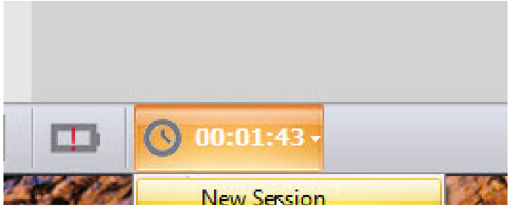
C:\dell\Noelle\

NEW SESSION

Clicking New Session in the file menu will:

- Clear any loaded/playing scenario
- Clear any loaded/playing palette
- Reset vital signs to normal values
- Clear out log page
- Restart the session clock.

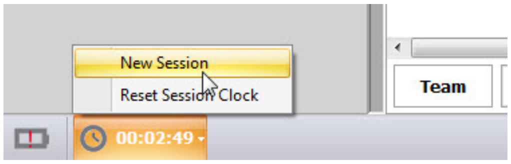
The session clock is located at the bottom of the dialog box.


00:01:43
New Session

The shortcut key for staring a new session is: Ctrl + N

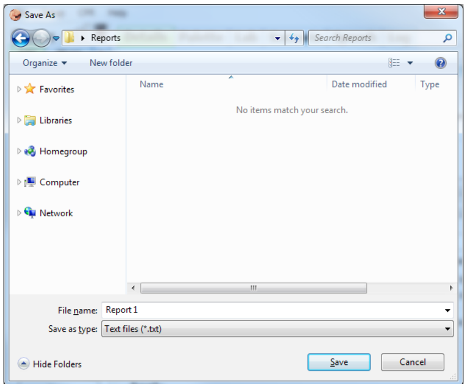
RESET SESSION CLOCK

Clicking on Reset Session Clock resets the clock back to zero. It does not have any effect on the transition time remaining on a scenario; it does not reset the vital signs, or clear out loaded scenarios. The facilitator can also reset the session clock by clicking on the Session button next to the session time.


New Session
Reset Session Clock
Team
00:02:49

SAVE REPORT

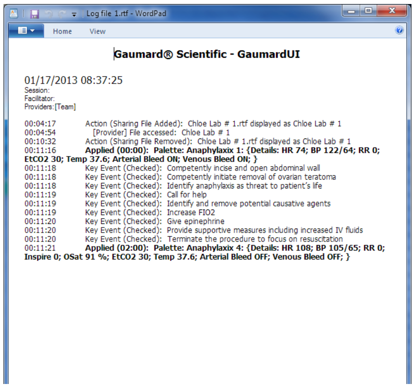
This option allows you to save all the information recorded in the log page as a text file. Clicking on it brings up the "Save As" dialog box:


Save As
Reports
Search Reports
Organize
New folder
Name
Date modified
Type
No items match your search.
Favorites
Libraries
Homegroup
Computer
Network
Hide Folders
Save
Cancel

File name: Report 1
Save as type: Text files (*.txt)

Select the desired name and path, and click "Save".

The shortcut key for saving a report is Ctrl + S. For a sample report, look at the figure below:


Log file 1.rtf - WordPad
Home
View

```
Gaumard® Scientific - GaumardUI

01/17/2013 08:37:25
Session:
Facilitator:
Providers:[Team]

00:04:17        Action (Sharing File Added):  Chloe Lab # 1.rtf displayed as Chloe Lab # 1
00:04:54          [Provider] File accessed:  Chloe Lab # 1
00:10:32        Action (Sharing File Removed):  Chloe Lab # 1.rtf displayed as Chloe Lab # 1
00:11:16        Applied (00:00):  Palette: Anaphylaxix 1: {Details: HR 74; BP 122/64; RR 0;
EtCO2 30; Temp 37.6; Arterial Bleed ON; Venous Bleed ON; }
00:11:18        Key Event (Checked):  Competently incise and open abdominal wall
00:11:18        Key Event (Checked):  Competently initiate removal of ovarian teratoma
00:11:18        Key Event (Checked):  Identify anaphylaxis as threat to patient's life
00:11:19        Key Event (Checked):  Call for help
00:11:19        Key Event (Checked):  Identify and remove potential causative agents
00:11:19        Key Event (Checked):  Increase FIO2
00:11:20        Key Event (Checked):  Give epinephrine
00:11:20        Key Event (Checked):  Provide supportive measures including increased IV fluids
00:11:20        Key Event (Checked):  Terminate the procedure to focus on resuscitation
00:11:21        Applied (02:00):  Palette: Anaphylaxix 4: {Details: HR 108; BP 105/65; RR 0;
Inspire 0; OSat 91 %; EtCO2 30; Temp 37.6; Arterial Bleed OFF; Venous Bleed OFF; }
```

PRINT REPORT

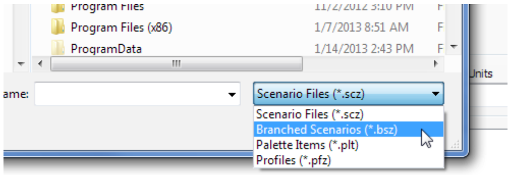
This option allows you to print a text file containing all the information in the log for the latest session. Clicking on "Print Report" brings up the Print dialog box. The shortcut key for this option is Ctrl + P.

IMPORT

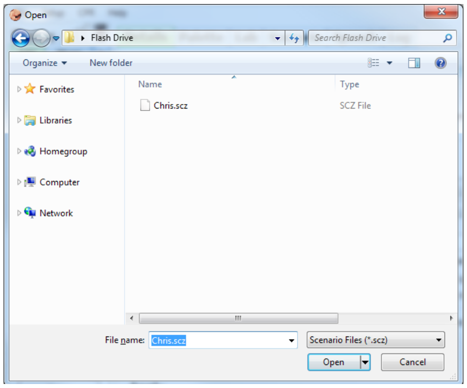
Use the "Import" menu to import palettes, scenarios, and modeling patients created on another PC or stored in a backup location.

To import an item into UNI:

1. Click File>Import on the menu to access the "Open" menu.
2. Set the type of file to import.


Program Files
Program Files (x86)
1/7/2013 8:51 AM
ProgramData
1/14/2013 2:43 PM
ame:
Units
Scenario Files (*.scz)
Scenario Files (*.scz)
Branched Scenarios (*.bsz)
Palette Items (*.plt)
Profiles (*.pfz)

3. Browse to the location where the item is saved and click "Open" to import.


Open
Flash Drive
Search Flash Drive
Organize
New folder
Name
Type
Chris.scz
SCZ File
Favorites
Libraries
Homegroup
Computer
Network
Open
Cancel

File name: Chris.scz
Scenario Files (*.scz)

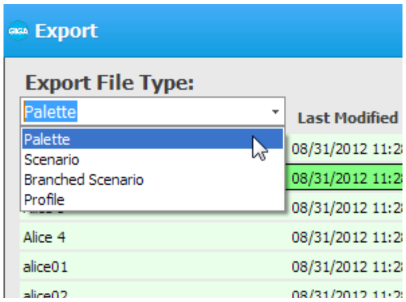
The scenario file is copied to the UNI scenario library automatically.

EXPORT

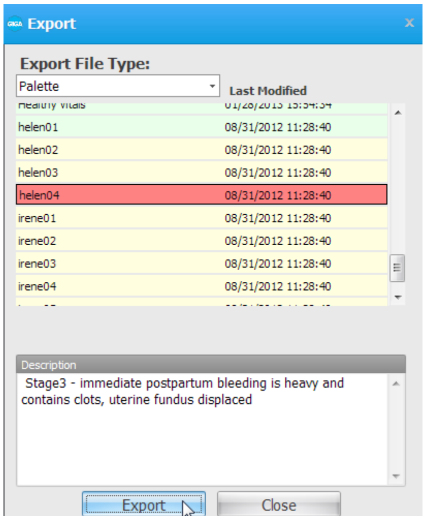
Use the Export feature to backup palettes, scenarios (branched or linear), and model patients files.

To export an item and save it to a location on the computer:

1. Click File > Export to open the "Export" menu
2. Select the file type from the "Export File Type" drop down menu:


Export
Export File Type:
Palette
Last Modified
Palette
Scenario
Branched Scenario
Profile
Alice 4
alice01
alice02
08/31/2012 11:2

3. Select the item to export from the list and click "Export"


Export
Export

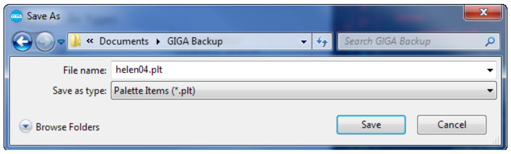
Export File Type: Palette

	Last Modified
helen01	08/31/2012 11:28:40
helen02	08/31/2012 11:28:40
helen03	08/31/2012 11:28:40
helen04	08/31/2012 11:28:40
irene01	08/31/2012 11:28:40
irene02	08/31/2012 11:28:40
irene03	08/31/2012 11:28:40
irene04	08/31/2012 11:28:40

Description: Stage3 - immediate postpartum bleeding is heavy and contains clots, uterine fundus displaced

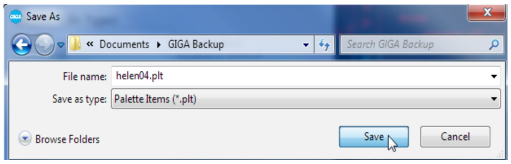
Export
Close

The "Save As" window is displayed.


Save As
« Documents ▸ GIGA Backup
Search GIGA Backup
Browse Folders
Save
Cancel

File name: helen04.plt
Save as type: Palette Items (*.plt)

4. Browse to the location where the file will be saved and click "Save".

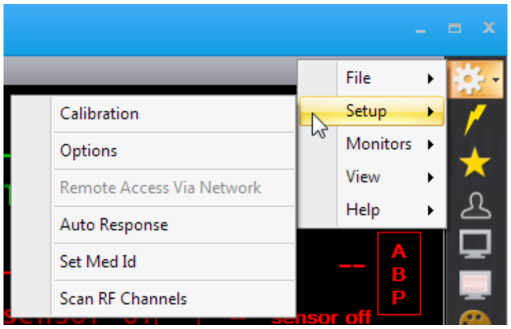

Save As
« Documents ▸ GIGA Backup
Search GIGA Backup
Browse Folders
Save
Cancel

File name: helen04.plt
Save as type: Palette Items (*.plt)

EXIT

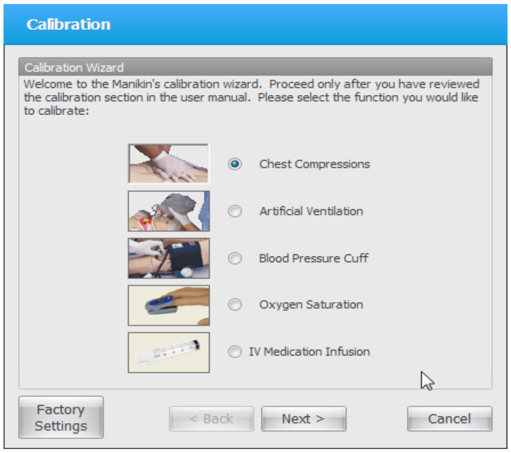
Click File > Exit to close the UNI software and turn the simulator off. Alternatively, click the power bottom and click the X icon near the top corner of the screen.

SETUP


Calibration
Options
Remote Access Via Network
Auto Response
Set Med Id
Scan RF Channels
File
Setup
Monitors
View
Help
A
B
P
sensor off

CALIBRATION

This tool allows you to easily calibrate the sensors inside the simulator. First choose which function you would like to calibrate: chest compressions, artificial ventilations, or blood pressure cuff. The Simulator will not breathe or have chest rise during any calibration procedure.


Calibration
Calibration Wizard

Welcome to the Manikin's calibration wizard. Proceed only after you have reviewed the calibration section in the user manual. Please select the function you would like to calibrate:

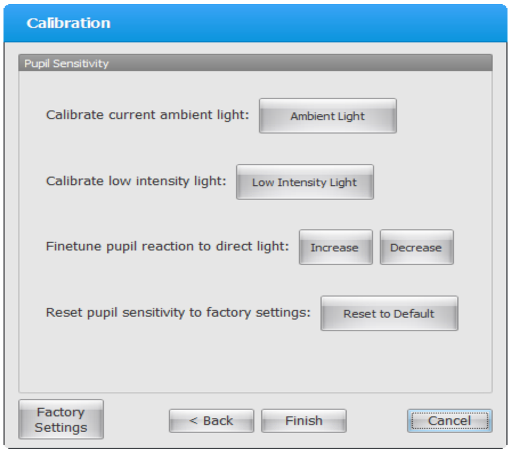
● Chest Compressions
○ Artificial Ventilation
○ Blood Pressure Cuff
○ Oxygen Saturation
○ IV Medication Infusion

Factory Settings
< Back
Next >
Cancel

The procedures for each specific calibration are described in the sections below.

- Pupil Sensitivity
- Chest compressions
- Artificial Ventilations
- Blood Pressure Cuff
- Oxygen Saturation
- IV Medication Infusion (Drug recognition)

PUPIL SENSITIVITY


Calibration
Pupil Sensitivity

Calibrate current ambient light: Ambient Light
Calibrate low intensity light: Low Intensity Light
Finetune pupil reaction to direct light: Increase Decrease
Reset pupil sensitivity to factory settings: Reset to Default

Factory Settings
< Back
Finish
Cancel

The simulator's pupils react to light. Use the "Pupil Sensitivity" controls to recalibrate the pupil reaction if dilation is erratic.

Calibrate current ambient light - Click "Ambient Light" to recalibrate the pupil diameter to the current ambient light.

Calibrate low intensity Light - While covering both eyes from most incoming light, click "Low intensity Light" to set the low light pupil diameter.

Finetune pupil reaction to direct light - Click increase or decrease to adjust the pupil's sensitivity to light.

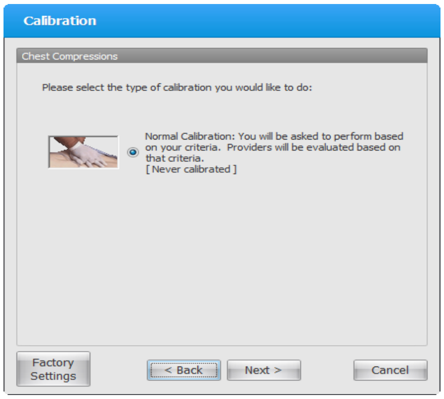
Reset pupil sensitivity to factory settings- Reset the pupils' ambient and low intensity light to the factory settings.

CHEST COMPRESSIONS/ARTIFICIAL VENTILATIONS

This tool helps you calibrate the chest compressions and the artificial ventilations to your specific criteria. That is, you will be telling the system what a correct chest compression is and/or what a correct artificial ventilation is. Providers will be evaluated by the system based on this criteria.

If the simulator includes a compression sensor that determines the depth in inches/cm, the calibration for chest compression will be disabled.

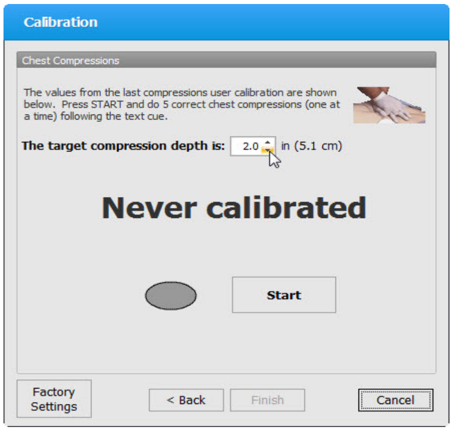
The chest compressions and ventilations are calibrated the same way. After making a selection, this dialog box is displayed:



Please select the type of calibration you would like to do:

● Normal Calibration: You will be asked to perform based on your criteria. Providers will be evaluated based on that criteria.
[Never calibrated]

Click next to proceed with the calibration.



The values from the last compressions user calibration are shown below. Press START and do 5 correct chest compressions (one at a time) following the text cue.

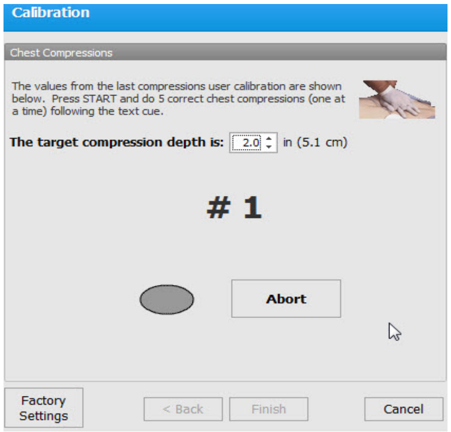
The target compression depth is: 2.0 in (5.1 cm)

Never calibrated

The software will now ask you to perform a number of "correct" chest compressions or artificial ventilations, depending on what you are calibrating.

The facilitator should follow the text cue on the screen to perform just ONE compression or ventilation at a time, until prompted for the next one.

For example, if calibrating chest compressions:



The values from the last compressions user calibration are shown below. Press START and do 5 correct chest compressions (one at a time) following the text cue.

The target compression depth is: 2.0 in (5.1 cm)

# 1

- Select the target compression depth for the chest compressions calibration criteria
- The wizard prompts you with a "#1".
- Perform one correct chest compression.
- A green filled oval indicates that the chest compression was successfully recorded.
- The wizard prompts you with "#2".
- Perform a second correct chest compression.
- A green filled oval indicates that the chest compression was successfully recorded.
- Continue the process as instructed by the screens.

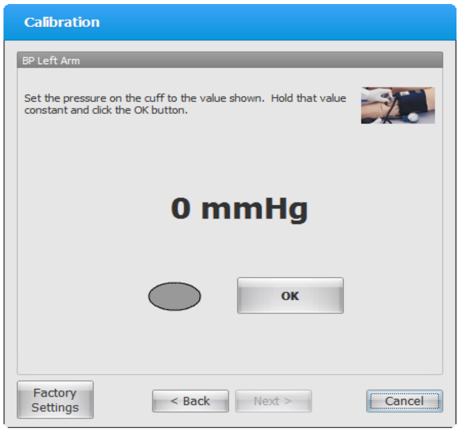
At the end of the calibrating session, the wizard shows the average peak, depth, and duration values for the procedure. If you feel you performed the procedures correctly, click the “Save” button. Otherwise, press the “Back” button to repeat the calibration. Notice that you can go back, abort or cancel at any time during the procedure.

BLOOD PRESSURE CUFF

Blood pressure cuff calibration should be performed only when the Korotkoff sounds do not match the systolic and diastolic values set from the computer.

1. To calibrate, place the blood pressure cuff on the arm you wish to calibrate, right or left.
2. Select which arm you will like to calibrate.
3. You will then be prompted to set the BP cuff to a certain pressure, hold that pressure constant, and press the “OK” button. Follow the text cue on the screen and repeat the procedure for each pressure level until “Done” is displayed.

For example, if calibrating the left arm:



Set the pressure on the cuff to the value shown. Hold that value constant and click the OK button.

1. The wizard prompts you with “0 mmHg.”
2. Set the pressure on the BP cuff to 0 (i.e. cuff valve open).
3. Click the “OK” button.

A green filled oval indicates that the value was successfully set.

4. The wizard then prompts you with “20 mmHg”.
5. Set the pressure on the BP cuff to 20 mmHg.
6. Click the “OK” button.
7. A green filled oval indicates the value was successfully set.
8. Continue the process as instructed by the screens.
9. Once the prompt reads “Done”, go back and calibrate another function or click the “Finish” button to close the calibration wizard.

OXYGEN SATURATION

This feature allows you to calibrate the oxygen saturation.

WARNING

Oxygen saturation is calibrated to match a specific oximeter. Repeatability is accomplished when using the same oximeter and sensor. Even if the oximeter is interchanged with another one from the same brand and model, the reading might not coincide. To avoid reading discrepancies, calibrate this feature each time a different oximeter or sensor is used.

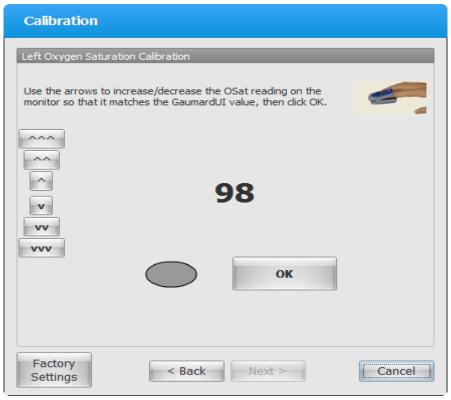
Co-Oximeters that in addition to reading oxygen saturation also read carbon monoxide (SpCO) and methemoglobin (SpMet) do not work with this simulator.

To calibrate the oxygen saturation, follow the steps below:

1. Make sure that the oximeter is turned off. Place the oximeter sensor all the way into the index finger, making sure the finger is at the center covering the emitting and sensing element.
2. Go to Setup>Calibration and select “Oxygen Saturation”. Click “Next”.

A message box is displayed to remind you to have the oximeter turned off. “Click OK”.

3. Select which finger you want to calibrate, left or right. Then click “Next”.
4. Turn on the oximeter and click “OK” on the dialog box.
5. The oxygen saturation calibration dialog box is displayed (for 98%).



Use the arrows to increase/decrease the OSat reading on the monitor so that it matches the GaumardUI value, then click OK.

6. Using the arrows on the left column of the calibration dialog box, adjust the reading on the oximeter monitor screen, to match the 98 displayed on the UNI screen.

For large increases or decreases, use the triple arrows. For moderate changes, use the double arrows. Use single arrows for small changes of one or two percent reading (only for 98% calibration).

To ensure proper calibration, always allow the oximeter to stabilize readings by waiting 3-5 seconds after the on screen value is displayed. After the value on the oximeter screen stabilizes, click “Next” to continue calibration.

7. Click “OK”. The calibration oval blinks green before showing the next value.

The oxygen saturation calibration dialog box for 80% is now displayed. Calibrate using the instructions from step 7 and 8.

8. The oxygen saturation calibration dialog box for 60% is now displayed. Calibrate using the instructions from step 7 and 8. Once you achieve the desired results, click “OK”.
9. After the calibration oval blinks green, the following dialog box will be displayed, indicating that the calibration has been completed.
10. Click Finish.

TESTING THE CALIBRATION

1. Go to the details page and vary the oxygen saturation value on the software.
2. Observe that the oximeter reading coincides with the value you specified (±3 differences are acceptable on readings above 80%).
3. Test calibration at two points; values between 80 and 95% are recommended.
4. Now take the oximeter sensor off the finger, wait for five seconds and again place the sensor on the finger.
5. Make sure to slide the finger all the way into the oximeter sensor and in the same position as it was calibrated.
6. Check that the oximeter reading coincides with the value specified on the Details page (±3 % value differences are accepted).

If it does, you are ready to use the oxygen saturation feature with this oximeter. If the first, second, or both readings do not coincide, make sure to slide the finger all the way into the oximeter sensor. If the reading still does not coincide, the feature was not properly calibrated. Go back to step one and repeat the procedure.

For information on troubleshooting this feature, refer to the troubleshooting guide in the Appendix.

IV MEDICATION INFUSION (OPTIONAL)

This feature allows you to calibrate the IV medication infusion for the drug recognition module. The system is calibrated from the factory. Re-calibrate only if necessary.

WARNING

The simulator must be powered on when working with the drug recognition arm. This includes calibration, purging, draining, IV infusion, Set Med Id and injecting fluids. Failure to do so will permanently damage the simulator and void the warranty.

You must be in the Automatic mode to use the drug recognition module; otherwise the module will not work.

After the calibration is complete, please wait 2 minutes for the system to record the new calibration.

To calibrate, follow the steps below:

1. Turn on the simulator.
2. Locate the drug recognition fill kit and attach the drain hose to the black output port. Place the end of the drain tube inside a container lower than the arm in order to siphon the fluids in the next steps.
3. Next, attach a pre-filled syringe with clean water to the white port.
4. Insert water in the system until fluids flow through the drainage hose into the container. The fluid drained must flow in a downward direction.

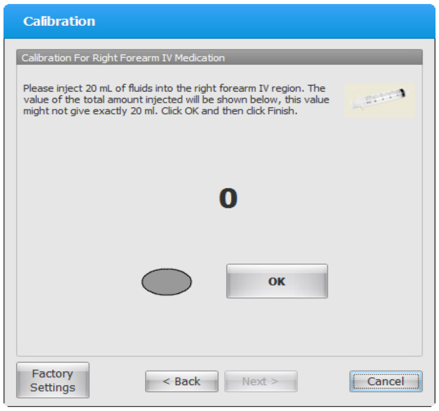
WARNING

You must always have water in the IV vasculature for the drug recognition module to work.

5. Go to the Setup menu and click on Calibration.
6. The Calibration dialog box is displayed. Select IV Medication Infusion and click "Next".
7. Select the arm to calibrate and click next.

The calibration information box is a reminder that the IV vasculature must be filled with fluid before continuing.

8. Follow the instructions and insert 20 ml of fluids in the forearm using the fill syringe. Remember to keep the drain tube connected throughout the calibration process.


Calibration
Calibration For Right Forearm IV Medication
0
OK
Factory Settings
< Back
Next >
Cancel

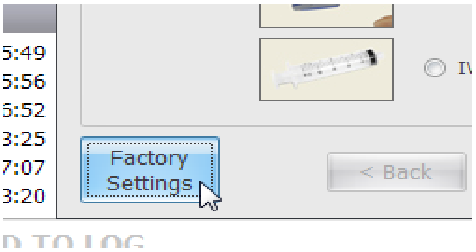
Please inject 20 mL of fluids into the right forearm IV region. The value of the total amount injected will be shown below, this value might not give exactly 20 ml. Click OK and then click Finish.

9. The value in the middle of the window will begin to update as you slowly insert the fluid. After inserting 20 mL, click "OK".
10. The word "Done" will flash in the middle of the window, and the oval will fill green temporarily.
11. After a few seconds, the "Finish" button will be enabled and the oval will default back to gray.
12. Click "Finish" to save the new calibration.

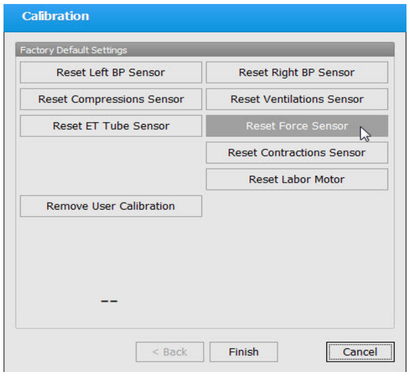
After the calibration is complete, please wait 2 minutes for the system to record the new calibration.

FACTORY SETTINGS

Factory Settings is a very useful tool to consider when recalibrating. It restores the sensors to factory settings over-riding any calibrations performed by users.


5:49
5:56
5:52
3:25
7:07
3:20
IV
Factory Settings
< Back

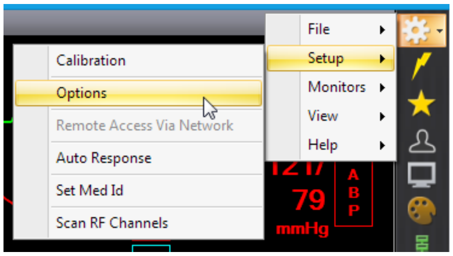
Make sure that when you are restoring the sensors to the factory settings that no one is practicing chest compressions, ventilations, intubation or reading a blood pressure. Any of these actions may interfere with the reset. Each time that one of these sensors is clicked a message will appear at the bottom left of the screen notifying the user of the status of the reset (OK, or TRY AGAIN). Should the Sensor not respond, please refer to the troubleshooting guide or contact Customer Support.


Calibration
Factory Default Settings
Reset Left BP Sensor
Reset Right BP Sensor
Reset Compressions Sensor
Reset Ventilations Sensor
Reset ET Tube Sensor
Reset Force Sensor
Reset Contractions Sensor
Reset Labor Motor
Remove User Calibration
--
< Back
Finish
Cancel

At the end of calibrating a function, the Calibration Wizard resets the simulator for the changes to take effect and displays the message “Done”. If the wizard displays the message “Can’t reset”, it simply means that the new calibration values will take effect next time you start the software. If the changes need to take immediate effect, simply close the UNI software, wait about one minute (for the simulator to turn off), and then start UNI again.

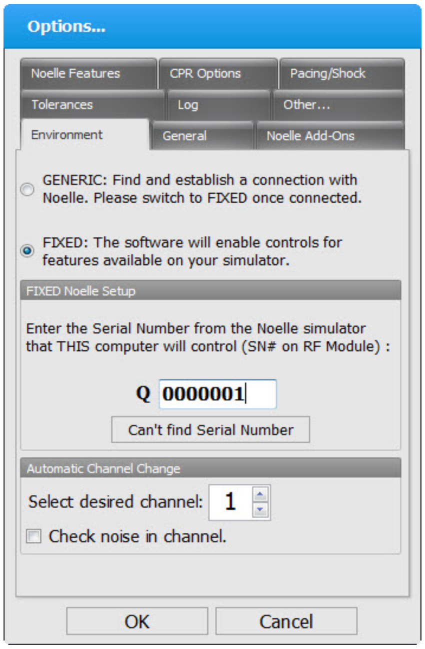
OPTIONS

Navigate through the Options menu to configure software settings and enable additional features.


File
Setup
Monitors
View
Help
Calibration
Options
Remote Access Via Network
Auto Response
Set Med Id
Scan RF Channels
79
A
B
P
mmHg

ENVIRONMENT

The environment tab is used to configure the connectivity options. Select the “GENERIC” option to scan and connect to the nearest simulator. Alternatively, select the FIXED option and enter the simulator’s serial number to connect to a specific simulator only. The FIXED mode is required to enter activation code for upgrade features.


Options...
Noelle Features
CPR Options
Pacing/Shock
Tolerances
Log
Other...
Environment
General
Noelle Add-Ons
FIXED Noelle Setup
Can't find Serial Number
Automatic Channel Change
OK
Cancel

○ GENERIC: Find and establish a connection with Noelle. Please switch to FIXED once connected.

● FIXED: The software will enable controls for features available on your simulator.

Enter the Serial Number from the Noelle simulator that THIS computer will control (SN# on RF Module) :

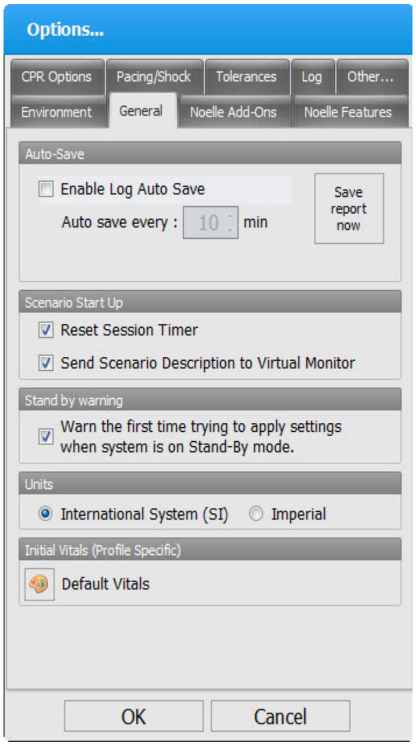
Q 0000001

Select desired channel: 1

☐ Check noise in channel.

GENERAL

This tab allows the facilitator to:


Options...
CPR Options
Pacing/Shock
Tolerances
Log
Other...
Environment
General
Noelle Add-Ons
Noelle Features
Auto-Save
Save report now
Scenario Start Up
Stand by warning
Units
Initial Vitals (Profile Specific)
Default Vitals
OK
Cancel

☐ Enable Log Auto Save

Auto save every : 10 min

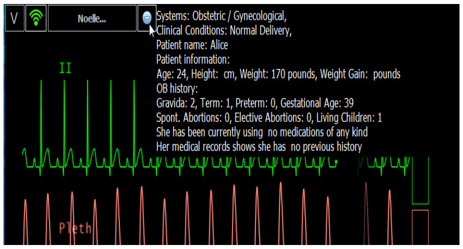
☑ Reset Session Timer

☑ Send Scenario Description to Virtual Monitor

☑ Warn the first time trying to apply settings when system is on Stand-By mode.

● International System (SI) ○ Imperial

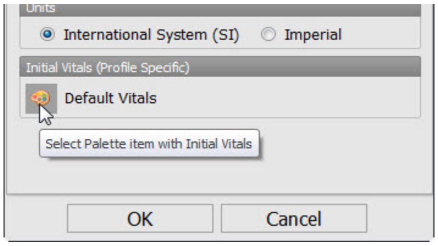
- Enable auto saving of the log
- Save your current log report
- Reset the session timer and send scenario description to the Virtual Monitor every time a scenario is started


V
Noelle...
II
Pleth

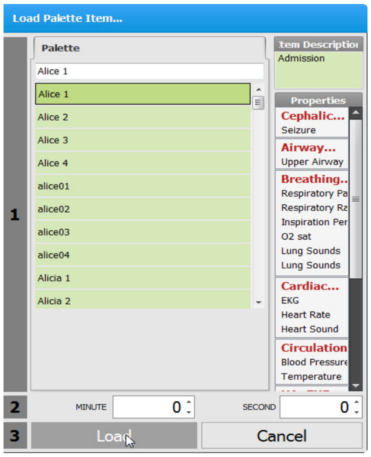
Systems: Obstetric / Gynecological,
Clinical Conditions: Normal Delivery,
Patient name: Alice
Patient information:
Age: 24, Height: cm, Weight: 170 pounds, Weight Gain: pounds
OB history:
Gravida: 2, Term: 1, Preterm: 0, Gestational Age: 39
Spont. Abortions: 0, Elective Abortions: 0, Living Children: 1
She has been currently using no medications of any kind
Her medical records shows she has no previous history

- Enable stand-by warning
- Select units (SI or English)
- Select default vital signs for each specific profile:

1. Click “Default Vitals” icon.


Units
● International System (SI) ○ Imperial
Initial Vitals (Profile Specific)
Default Vitals
Select Palette item with Initial Vitals
OK
Cancel

2. Select the palette item and click “Load”.


Load Palette Item...
1
Palette
tem Descriptio
Properties
2
MINUTE
SECOND
3
Load
Cancel

Palette: Alice 1

Alice 1
Alice 2
Alice 3
Alice 4
alice01
alice02
alice03
alice04
Alicia 1
Alicia 2

Item Description: Admission

Cephalic...
Seizure

Airway...
Upper Airway

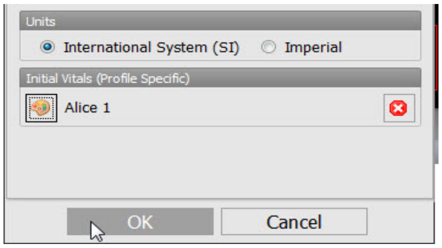
Breathing..
Respiratory Pa
Respiratory Ra
Inspiration Per
O2 sat
Lung Sounds
Lung Sounds

Cardiac...
EKG
Heart Rate
Heart Sound

Circulation
Blood Pressure
Temperature

MINUTE 0
SECOND 0

Now the “Alice1” vitals will be load as default every time the simulator is started.

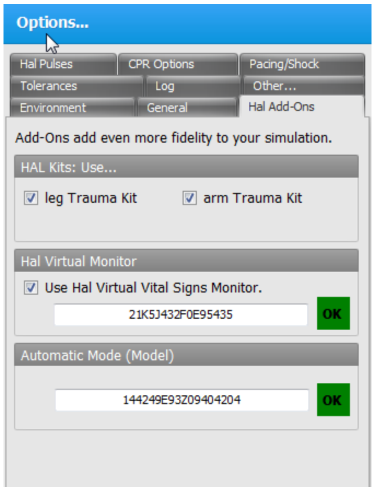

Units
● International System (SI) ○ Imperial
Initial Vitals (Profile Specific)
OK
Cancel

Alice 1

Notice that this feature is profile specific, so it will only apply for the profile in question.

SIMULATOR ADD-ONS

Activation codes enable upgrade and additional software features.


Options...
Hal Pulses
CPR Options
Pacing/Shock
Tolerances
Log
Other...
Environment
General
Hal Add-Ons
HAL Kits: Use...
Hal Virtual Monitor
Automatic Mode (Model)
OK
OK

Add-Ons add even more fidelity to your simulation.

☑ leg Trauma Kit ☑ arm Trauma Kit

☑ Use Hal Virtual Vital Signs Monitor.

21K5J432F0E95435

144249E93Z09404204

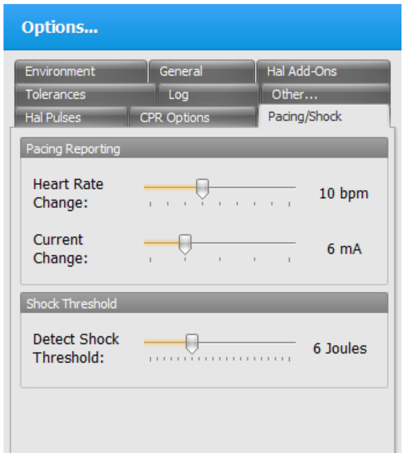
Activation codes are unique to the simulator’s serial number. Before entering a code to activate a feature, go to the Environment tab, set the connectivity mode to FIXED, and enter the simulator’s serial number.

- Automatic Mode – Enter the Automatic Mode activation code to enable the automatic operating mode option in the profile menu.

Add-ons will vary according to each simulator

PACING/SHOCK

UNI can detect small variations in the heart rate and current during pacing. Each variation could trigger a programmed auto response or create a new entry in the log event. Adjust the threshold for each parameter so only the changes greater than the ones specified will be detected by the UNI software.


Options...
Environment
General
Hal Add-Ons
Tolerances
Log
Other...
Hal Pulses
CPR Options
Pacing/Shock
Pacing Reporting
Shock Threshold

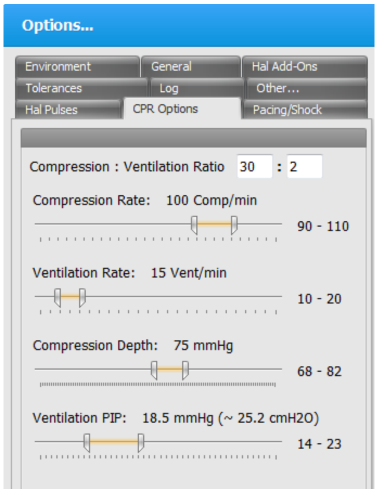
Heart Rate Change: 10 bpm

Current Change: 6 mA

Detect Shock Threshold: 6 Joules

CPR OPTIONS

Configure the CPR trainer parameters to meet the most current CPR standards.


Options...
Environment
General
Hal Add-Ons
Tolerances
Log
Other...
Hal Pulses
CPR Options
Pacing/Shock

Compression : Ventilation Ratio 30 : 2

Compression Rate: 100 Comp/min 90 - 110

Ventilation Rate: 15 Vent/min 10 - 20

Compression Depth: 75 mmHg 68 - 82

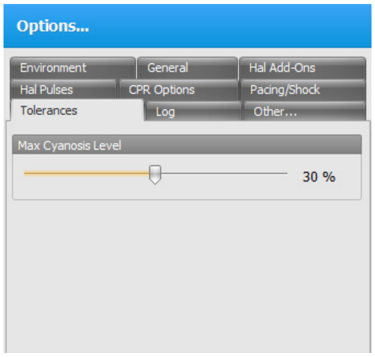
Ventilation PIP: 18.5 mmHg (~ 25.2 cmH2O) 14 - 23

Use the controls in this window to adjust error margin allowed by the CPR intensity and rate:

- Set the number of compressions per minute
- Set number of ventilations per minute
- Set average of compression depth
- Set average of ventilation PIP (peak inspiratory pressure)

TOLERANCES

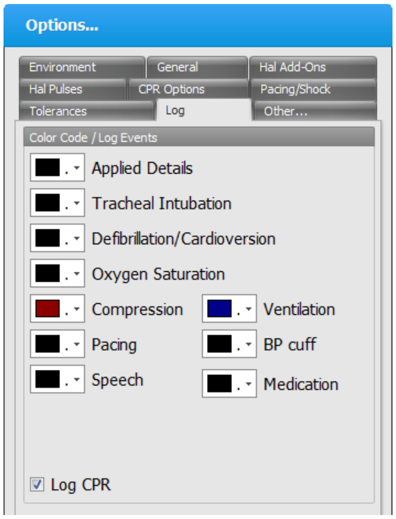
Use the Tolerances to adjust the maximum cyanosis level.


Options...
Environment
General
Hal Add-Ons
Hal Pulses
CPR Options
Pacing/Shock
Tolerances
Log
Other...

Max Cyanosis Level 30 %

LOG

Log event text entries are color-coded. Use the log tab to customize the color of each log entry type. Also, select or deselect "Log CPR" to have CPR recorded in the Log window.


Options...
Environment
General
Hal Add-Ons
Hal Pulses
CPR Options
Pacing/Shock
Tolerances
Log
Other...
Color Code / Log Events
Applied Details
Tracheal Intubation
Defibrillation/Cardioversion
Oxygen Saturation
Compression
Ventilation
Pacing
BP cuff
Speech
Medication

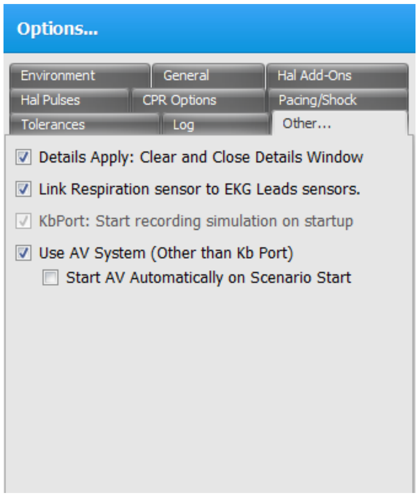
☑ Log CPR

OTHER

Checkmark "Details Apply: clear and close details window" to show the value of each palette's vital signs parameter on the Details tab control fields.

Checkmark "Link respiration sensor to EKG leads sensors" to generate artifacts with each compression.

Checkmark "Use AV system other than Kb Port" to display the audio and video configuration menu on the menu tab.


Options...
Environment
General
Hal Add-Ons
Hal Pulses
CPR Options
Pacing/Shock
Tolerances
Log
Other...

☑ Details Apply: Clear and Close Details Window

☑ Link Respiration sensor to EKG Leads sensors.

☑ KbPort: Start recording simulation on startup

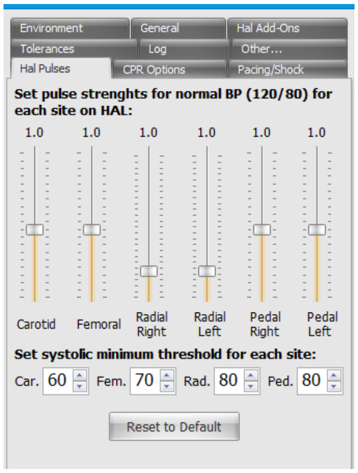
☑ Use AV System (Other than Kb Port)

☐ Start AV Automatically on Scenario Start

SIMULATOR FEATURES

This tab allows adjusting the pulse strength for all simulators. Also, Noelle and Newborn/Premie have additional features that can be adjusted in this tab.

HAL PULSES


Environment
General
Hal Add-Ons
Tolerances
Log
Other...
Hal Pulses
CPR Options
Pacing/Shock
1.0
1.0
1.0
1.0
1.0
1.0
Carotid
Femoral
Radial Right
Radial Left
Pedal Right
Pedal Left
Reset to Default

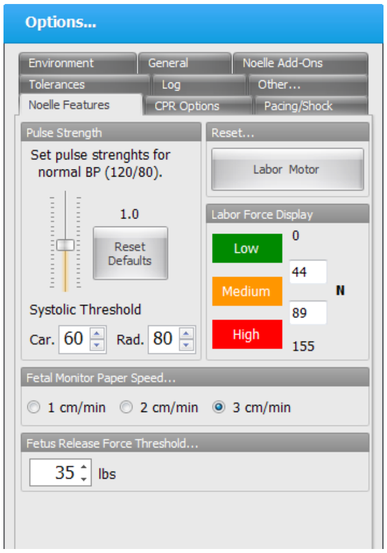
Set pulse strenghts for normal BP (120/80) for each site on HAL:

Set systolic minimum threshold for each site:

Car. 60 Fem. 70 Rad. 80 Ped. 80

- Pulse Strength - Adjust the pulse strength control to fine tune the pulse intensity felt at a normal blood pressure.

NOELLE FEATURES


Options...
Environment
General
Noelle Add-Ons
Tolerances
Log
Other...
Noelle Features
CPR Options
Pacing/Shock
Pulse Strength
Reset...
Labor Motor
1.0
Reset Defaults
Labor Force Display
Low
Medium
High
N
Fetal Monitor Paper Speed...
Fetus Release Force Threshold...

Set pulse strenghts for normal BP (120/80).

Systolic Threshold

Car. 60 Rad. 80

Labor Force Display: 0, 44, 89, 155

○ 1 cm/min ○ 2 cm/min ● 3 cm/min

35 lbs

- Pulse Strength - Adjust the pulse strength control to fine tune the pulse intensity felt at a normal blood pressure.
- Reset labor motor - Click “Reset Labor Motor” to recalibrate the motor’s starting position on the track. Remove the fetus from the abdomen before calibrating the motor.
- Labor Force Display - Set the low, medium, high threshold values displayed on the “labor force” display.
- Fetal Monitor Paper Speed - Select from the speeds to adjust the fetal monitor paper centimeter to minute ratio displayed on the virtual monitor screen.
- Set the fetus release force threshold in pounds.

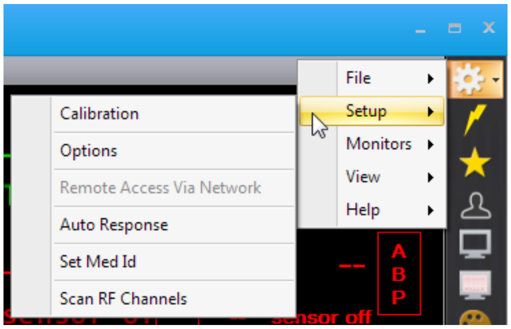
NEONATE FEATURES

Customize the following simulator specific features:

- Fine-tune the pulse intensity for normal blood pressure.
- Synchronize the leg blood pressure to the arm blood pressure when the values are not specified.
- Synchronize post-ductal and pre ductal oxygen saturation parameters when values are not specified.
- Use temperature sensor

REMOTE ACCESS VIA NETWORK

The “Remote Access via Network” feature allows UNI to communicate with the simulator remotely using the virtual monitor PC as the RF transmitter. The alternate configuration may provide better connectivity in environments with numerous walls or obstructions between the simulator and the control PC.


File
Setup
Monitors
View
Help
Calibration
Options
Remote Access Via Network
Auto Response
Set Med Id
Scan RF Channels
A
B
P
sensor off

The USB RF module drivers must be installed on the virtual monitor PC before the “Remote Access via Network” feature can be configured.

Go to www.Gaumard.com to download the latest USB RF module drivers using PC with internet access. Do not connect the Virtual Monitor PC to the internet. Transfer the USB RF module setup file to the virtual monitor PC using a USB drive and complete the installation.

To configure the “Remote Access via Network” connection:

1. Connect the simulator’s USB RF module an available USB port on the virtual monitor PC
2. Verify that both computers are connected to the ad-hoc network (e.g. GaumardNet,)
3. Initialize UNI on the tablet PC open the Remote Access via Network menu from the Setup menu
4. Select the Remote access via network radio button
5. Verify that Wireless Network Connection is selected from the adapter list
6. Click “Find available” to auto configure the port used for this connection
7. Write down the controller IP and port number, then click “Connect”
8. Navigate to the V menu on the virtual monitor computer and select “Remote access Via Network”

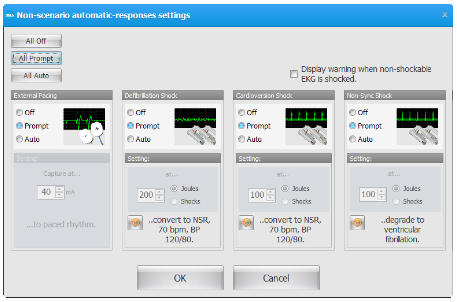
Please wait 30 seconds for the feature to initialize

9. Enter the “controller IP” and “port number” as shown on step 7 and click “connect”

AUTO RESPONSES

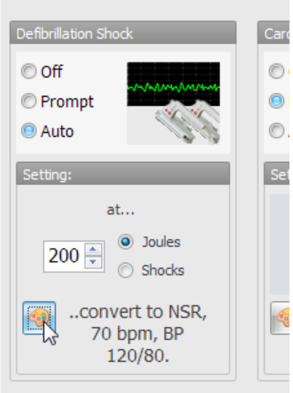
The Non-Scenario Automatic Response feature allows the facilitator to set preprogrammed responses to electrical therapy events. When the electrical therapy is detected, auto-responses can automatically load a specific palette item or prompt the facilitator before making preprogrammed changes to the simulator’s vital signs.

Non-scenario response settings detect electrical therapy administered when a scenario is not in progress. For information on how to configure auto-responses for use during a scenario, go to Scenarios section. To activate the virtual shock panel for administering electrical therapy virtually, go to Menu>Options>General.

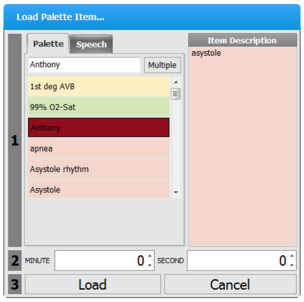

Non-scenario automatic-responses settings
All Off
All Prompt
All Auto
☐ Display warning when non-shockable EKG is shocked.
External Pacing
○ Off
● Prompt
○ Auto
Setting:
Capture at...
40 mA
...to paced rhythm.
Defibrillation Shock
○ Off
● Prompt
○ Auto
Setting:
at...
200
● Joules
○ Shocks
..convert to NSR, 70 bpm, BP 120/80.
Cardioversion Shock
○ Off
● Prompt
○ Auto
Setting:
at...
100
● Joules
○ Shocks
..convert to NSR, 70 bpm, BP 120/80.
Non-Sync Shock
○ Off
● Prompt
○ Auto
Setting:
at...
100
● Joules
○ Shocks
..degrade to ventricular fibrillation.
OK
Cancel

- The behavior of each auto response option is explained below:
- Off - The software does not respond to the electric therapy
- Prompt - The software detects the electrical therapy and prompts the facilitator before applying the changes configured in the “Settings” section.
- Auto - The software automatically detects the electrical therapy and compares it to a threshold selected by the provider. If the threshold is met, the vitals will automatically change to the parameters specified on the “Settings” section.

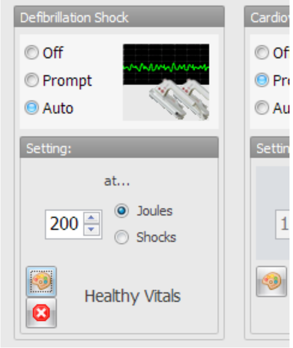
Each type of electrical therapy has a unique set of default parameters. For example, the default response to a defibrillation Shock applies the following vital sign parameter changes: NSR, 75 bpm, BP 120/80. Click the palette button to program a specific palette item as an auto-response.


Defibrillation Shock
○ Off
○ Prompt
● Auto
Setting:
at...
200
● Joules
○ Shocks
..convert to NSR, 70 bpm, BP 120/80.

Select the desired palette from the “Load Palette Item…” window and click “Load”.


Load Palette Item...
1
Palette
Speech
Anthony
Multiple
1st deg AVB
99% O2-Sat
Anthony
apnea
Asystole rhythm
Asystole
Item Description
asystole
2
MINUTE
0
SECOND
0
3
Load
Cancel

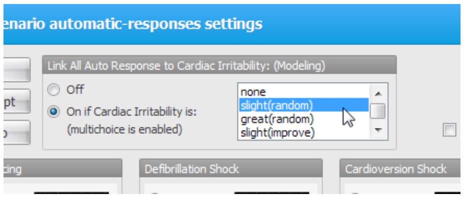
The defibrillation shock auto-response is now configured apply the “Healthy Resting” palette if a virtual defibrillation shock of 200 Joules or greater is detected. The programmed response palette is listed in the “settings:” panel.


Defibrillation Shock
○ Off
○ Prompt
● Auto
Setting:
at...
200
● Joules
○ Shocks
Healthy Vitals
Cardio
○ Of
● Pr
○ Au
Settin
1

AUTOMATIC MODE NON-SCENARIO AUTOMATIC RESPONSES

The "Automatic Mode non-scenario Automatic Responses" are unique to the automatic mode.

Link All Auto Response to Cardiac Irritability - Auto-responses will work only if the cardiac irritability option on the details page matches the selection on this window.


enario automatic-responses settings
Link All Auto Response to Cardiac Irritability: (Modeling)
○ Off
● On if Cardiac Irritability is:
(multichoice is enabled)
none
slight(random)
great(random)
slight(improve)
pt
ting
Defibrillation Shock
Cardioversion Shock

An event prompt is displayed if electrical therapy is detected and the cardiac irritability set does not match the selection on the responses window.

Drug Model Effect – Configure the auto-response behavior for drug administration.

- Auto – Apply the drug effects based on medication's programmed properties and dosage
- Prompt – Display a confirm prompt before applying the drug's effects

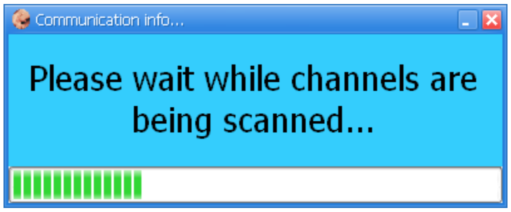
SET MED ID

For Instructions to program the tagged syringes with a medication type and a concentration, refer to the "Medication tab" subsection above.

SCAN RF CHANNELS

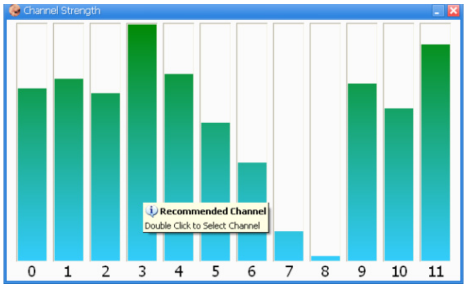
Use the Scan RF Channel tool to search for the strongest RF communication channel available.

Click the "Scan RF Channels"option in the setup menu to start the scan. Please wait while the system completes the process.


Communication info...

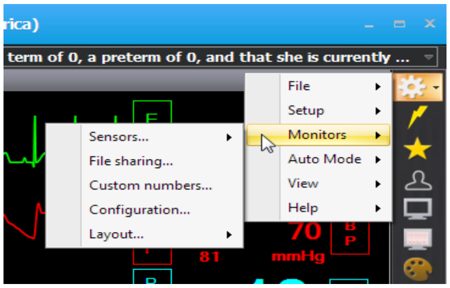
Please wait while channels are being scanned...

The tallest bar represents the strongest channel. Double click the bar to connect to the simulator using the channel selected.


Channel Strength
Recommended Channel
Double Click to Select Channel
0
1
2
3
4
5
6
7
8
9
10
11

MONITORS

Use the Monitors drop down menu to enable/disable sensors on the virtual monitor screen, share files, program custom scalars, and verify the connection between the UNI and Gaumard Virtual Monitor software.

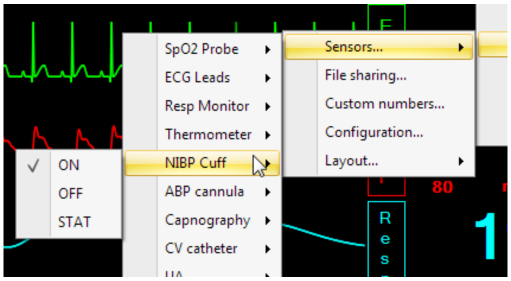

rica)
term of 0, a preterm of 0, and that she is currently ...
File
Setup
Monitors
Auto Mode
View
Help
Sensors...
File sharing...
Custom numbers...
Configuration...
Layout...
70
81
mmHg
BP

If the "Monitors" drop down is not showing, go to Setup>Options> Add-ons, and checkmark "Use Virtual Vital Signs Monitor."

SENSORS

Use the sensors option to enable or disable any of the waveforms displayed in the vital signs monitor. Select the waveform and click "ON" to display the readings on the virtual monitor screen. To disable a parameter reading, click

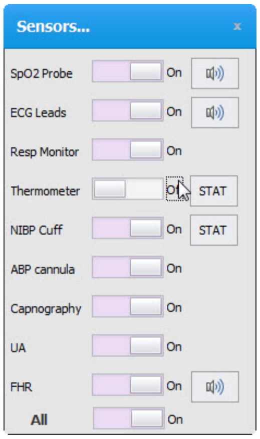
"OFF". The vital signs monitor sensors defaults to "All On."


ON
OFF
STAT
SpO2 Probe
ECG Leads
Resp Monitor
Thermometer
NIBP Cuff
ABP cannula
Capnography
CV catheter
Sensors...
File sharing...
Custom numbers...
Configuration...
Layout...

Some sensors, such as NIBP and Thermometer feature a STAT control that will allow the facilitator to activate readings on the virtual monitors from the controller software.

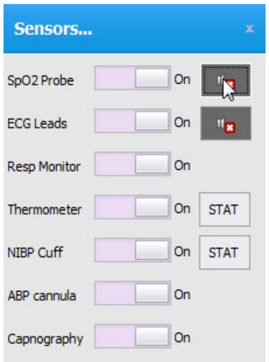
SENSOR CONTROL WINDOW

The sensor control window is a floating panel with on/off toggle controls. Click Monitors> Sensors> Window to open the floating sensor control panel.


Sensors...
SpO2 Probe
On
ECG Leads
On
Resp Monitor
On
Thermometer
STAT
NIBP Cuff
On
STAT
ABP cannula
On
Capnography
On
UA
On
FHR
On
All
On

Move the slider to enable or disable the sensors displayed on the virtual monitor screen. The sensor will show up as ON or OFF. In the example above, all the sensors are ON except the thermometer.

Use the audio icons to enable the sensors audio on/off on the Virtual Vital Signs Monitor.


Sensors...
SpO2 Probe
On
ECG Leads
On
Resp Monitor
On
Thermometer
On
STAT
NIBP Cuff
On
STAT
ABP cannula
On
Capnography
On

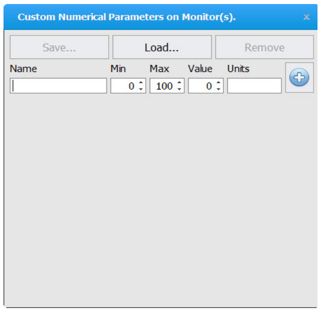
FILE SHARING

The file sharing menu allows the facilitator to send images, audio, and text files to the virtual monitor screen. Refer to "File Sharing" section above for more information.

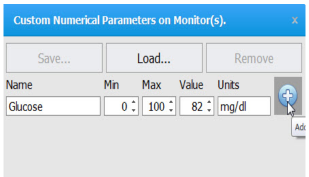
CUSTOM NUMBERS

Use the custom numbers feature to add custom numerical parameters to the Gaumard Monitors screen. For example, glucose levels or platelets count.

On the UNI menu bar click Monitors>Custom Numbers to open the "Custom Numerical Parameters on Monitor" menu.

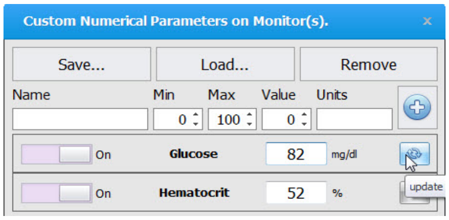

Custom Numerical Parameters on Monitor(s).
Save...
Load...
Remove
Name
Min
Max
Value
Units
0
100
0

Type the name, minimum value, maximum value, initial value and units of the new parameter and then click "Add".


Custom Numerical Parameters on Monitor(s).
Save...
Load...
Remove
Add

Name: Glucose
Min: 0
Max: 100
Value: 82
Units: mg/dl

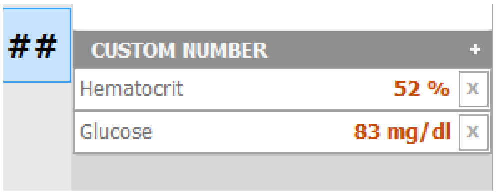
The scalar parameter is now created. The user can either enter a value for the parameter and click the update icon, or modify the value from the STATUS/DETAILS control


Custom Numerical Parameters on Monitor(s).

Name | Min 0 | Max 100 | Value 0 | Units

On Glucose 82 mg/dl

On Hematocrit 52 %

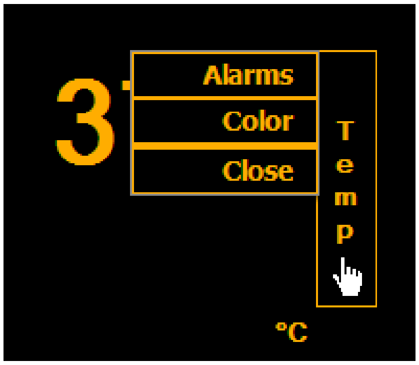


Hematocrit 52 %

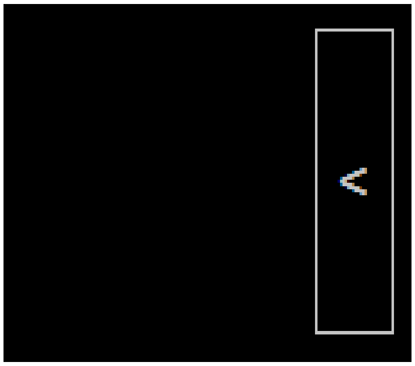
Glucose 83 mg/dl

The custom numbers saved on this list will be load automatically every time the UNI software is started.

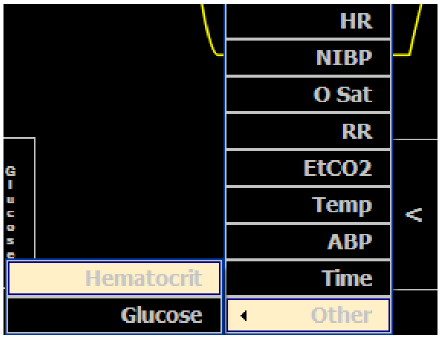
On the virtual monitor screen, click on a scalar's menu and select "Close" to make the entry available for the custom parameter.



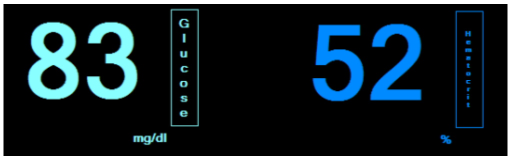
The scalar entry is now a blank field.



Click on the empty scalar menu and select "Other" from the list of available scalar parameters. Select the name of the custom parameter.

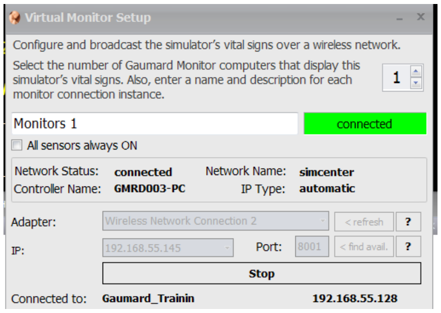


The figure below shows two new values: Glucose level and hematocrit levels. Return to the custom parameter menu on the UNI software to update the values when necessary.



CONFIGURATION

On the UNI menu bar, click Monitors> Configuration to open the "Virtual Monitor Setup" window. Use the setup window to verify the connection between the UNI software and the Gaumard Monitors vital signs software, re-configure the communication ports, and view the controller name. To troubleshoot connectivity issues between the two computers, please refer to the Appendix section.


Virtual Monitor Setup

Configure and broadcast the simulator's vital signs over a wireless network.

Select the number of Gaumard Monitor computers that display this simulator's vital signs. Also, enter a name and description for each monitor connection instance. 1

Monitors 1 connected

☐ All sensors always ON

Network Status: connected

Network Name: simcenter

Controller Name: GMRD003-PC

IP Type: automatic

Adapter: Wireless Network Connection 2

IP: 192.168.55.145

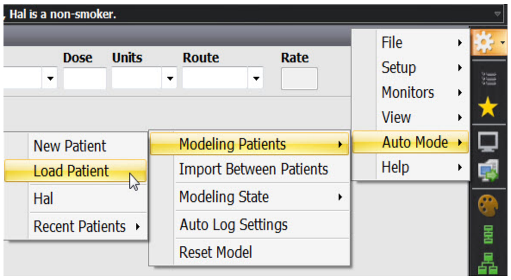
Port: 8001

Connected to: Gaumard_Trainin 192.168.55.128

AUTO MODE (OPTIONAL)

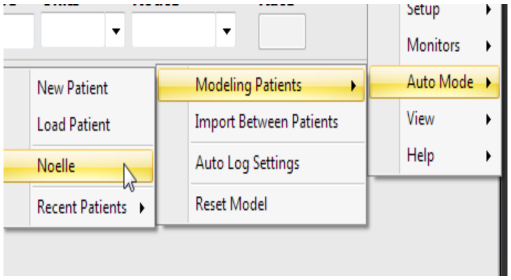
The "Auto Mode" drop down menu in the top left corner of the UNI contains four options: Modeling

Patients, Import Between Patients, Modeling State, Auto Log Settings, and Reset Model.

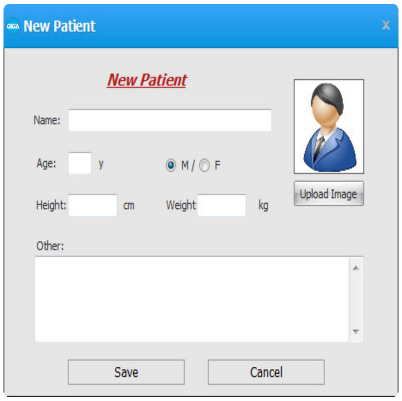

Hal is a non-smoker.
Dose
Units
Route
Rate
File
Setup
Monitors
View
Auto Mode
Help
New Patient
Load Patient
Hal
Recent Patients
Modeling Patients
Import Between Patients
Modeling State
Auto Log Settings
Reset Model

MODELING PATIENTS

This option allows you to create a new patient or load an already existing one. Pre-loaded models are found on the “Quick Start Simulator Modeling” profile.

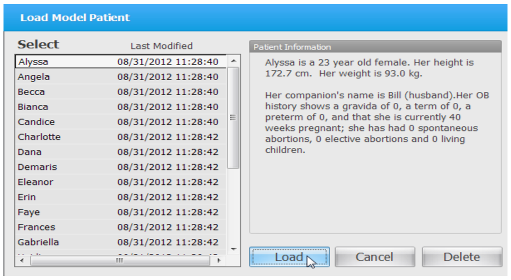

Setup
Monitors
Auto Mode
View
Help
New Patient
Load Patient
Noelle
Recent Patients
Modeling Patients
Import Between Patients
Auto Log Settings
Reset Model

1. To create a new patient, go to Auto Mode, Modeling Patient, new patient. Enter the name of the patient, age, gender, height, weight and/or additional notes, then click “Save”.


New Patient
New Patient
Name:
Age:
y
M / F
Height:
cm
Weight
kg
Other:
Upload Image
Save
Cancel

The physiological model will factor weight as it performs calculations and adjusts vital responses.

2. To load an already existing patient, go to Auto Mode, Modeling Patient, Load Patient.


Load Model Patient
Patient Information
Load
Cancel
Delete

Select	Last Modified
Alyssa	08/31/2012 11:28:40
Angela	08/31/2012 11:28:40
Becca	08/31/2012 11:28:40
Bianca	08/31/2012 11:28:40
Candice	08/31/2012 11:28:40
Charlotte	08/31/2012 11:28:42
Dana	08/31/2012 11:28:42
Demaris	08/31/2012 11:28:42
Eleanor	08/31/2012 11:28:42
Erin	08/31/2012 11:28:42
Faye	08/31/2012 11:28:42
Frances	08/31/2012 11:28:42
Gabriella	08/31/2012 11:28:42

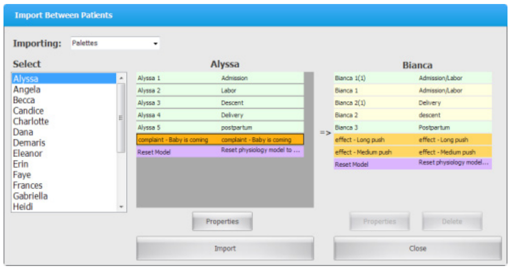
Alyssa is a 23 year old female. Her height is 172.7 cm. Her weight is 93.0 kg.

Her companion's name is Bill (husband).Her OB history shows a gravida of 0, a term of 0, a preterm of 0, and that she is currently 40 weeks pregnant; she has had 0 spontaneous abortions, 0 elective abortions and 0 living children.

3. Select the desired patient, and click on Load. Notice that the factory pre-set patient Simulator cannot be deleted, as opposed to any of the patients that you create yourself, which can be deleted.
4. Patient information is displayed by clicking on the picture in Status/Details, or by clicking on the patient bar next to the menu options.

IMPORT BETWEEN PATIENTS

Use the “Import between patients” menu to import palettes, scenarios, and branching scenarios from other patient profiles into the current active one.


Import Between Patients
Select
Alyssa
Angela
Becca
Candice
Charlotte
Dana
Demaris
Eleanor
Erin
Faye
Frances
Gabriella
Heidi
=>
Properties
Import
Properties
Delete
Close

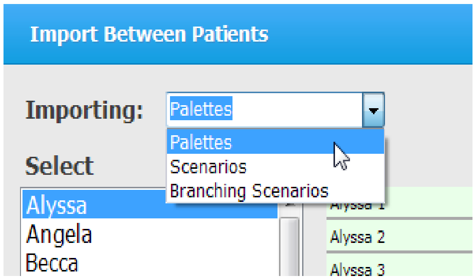
Importing: Palettes

Alyssa	
Alyssa 1	Admission
Alyssa 2	Labor
Alyssa 3	Descent
Alyssa 4	Delivery
Alyssa 5	postpartum
complaint - Baby is coming	complaint - Baby is coming
Reset Model	Reset physiology model to ...

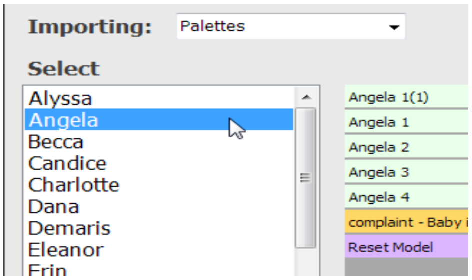
Bianca	
Bianca 1(1)	Admission/Labor
Bianca 1	Admission/Labor
Bianca 2(1)	Delivery
Bianca 2	descent
Bianca 3	Postpartum
effect - Long push	effect - Long push
effect - Medium push	effect - Medium push
Reset Model	Reset physiology model...

To import an item another patient in to the active patient:

1. Click Auto Mode> Import Patient to open the ”Import” menu
2. Select the item category to import


Import Between Patients
Importing:
Palettes
Palettes
Scenarios
Branching Scenarios
Select
Alyssa
Angela
Becca
Alyssa 1
Alyssa 2
Alyssa 3

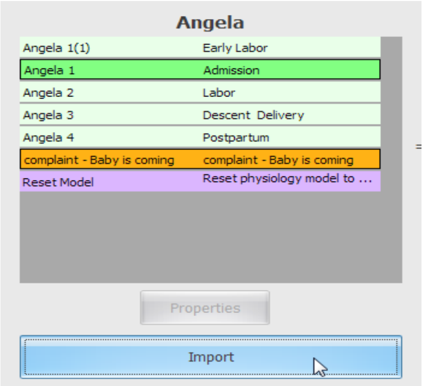
3. Select the patient name that contains the items to be imported into the active patient



Importing: Palettes

Select
Alyssa
Angela
Becca
Candice
Charlotte
Dana
Demaris
Eleanor
Erin
Angela 1(1)
Angela 1
Angela 2
Angela 3
Angela 4
complaint - Baby i
Reset Model

4. Select the items to import from the list and click “Import”

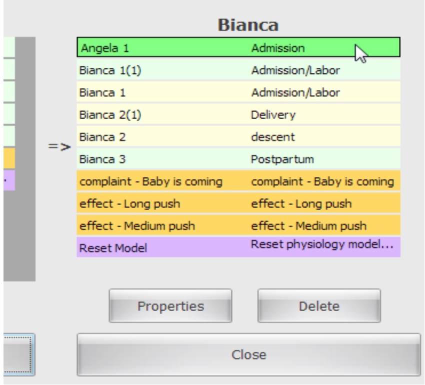


Angela

Angela 1(1)	Early Labor
Angela 1	Admission
Angela 2	Labor
Angela 3	Descent Delivery
Angela 4	Postpartum
complaint - Baby is coming	complaint - Baby is coming
Reset Model	Reset physiology model to ...

Properties
Import

The palettes are now copied into the active patient.



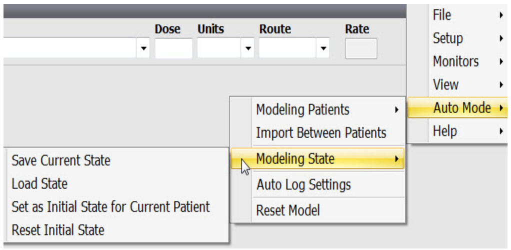
Bianca

Angela 1	Admission
Bianca 1(1)	Admission/Labor
Bianca 1	Admission/Labor
Bianca 2(1)	Delivery
Bianca 2	descent
Bianca 3	Postpartum
complaint - Baby is coming	complaint - Baby is coming
effect - Long push	effect - Long push
effect - Medium push	effect - Medium push
Reset Model	Reset physiology model...

=>
Properties
Delete
Close

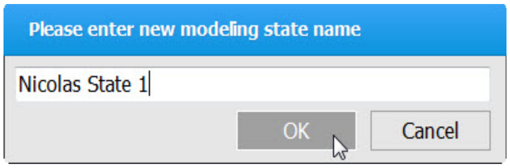
MODELING STATE

The Modeling State is like a snapshot of the physiologic model in the auto mode. “Modeling State” drop down menu under “Auto Mode” includes: Save Current State, Load State, Set Initial State for Current Patient, and Reset Initial State.



Dose
Units
Route
Rate
File
Setup
Monitors
View
Auto Mode
Help
Modeling Patients
Import Between Patients
Modeling State
Auto Log Settings
Reset Model
Save Current State
Load State
Set as Initial State for Current Patient
Reset Initial State

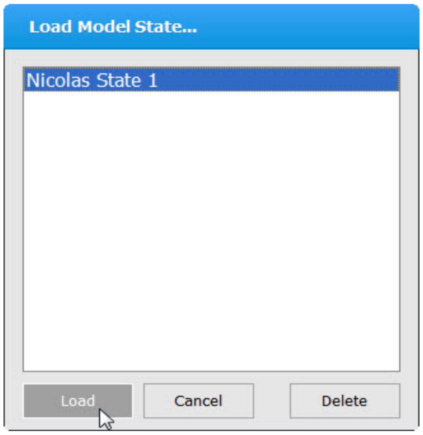
To save the current state of you new patient, click Auto Mode> Modeling State> Save Current State. Then enter the state name and click OK.



Please enter new modeling state name

Nicolas State 1

To load this state saved previously, select Auto Mode> Modeling State> Load State.

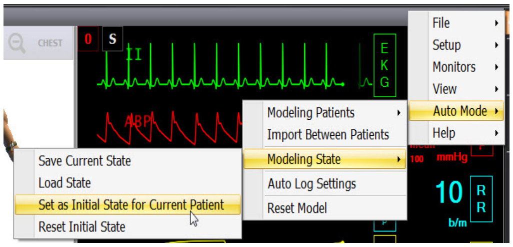


Load Model State...

Nicolas State 1

Load
Cancel
Delete

Additionally, this current state can set as the initial state for the current patient Then every time you reset this patient, it is going to have settings of this specific state.

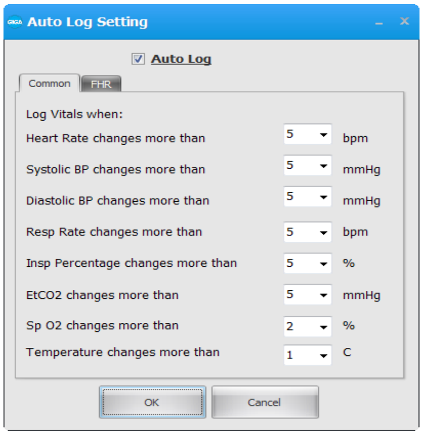


CHEST
0
S
II
E
K
G
ABP
100
mmHg
10
R
R
b/m
File
Setup
Monitors
View
Auto Mode
Help
Modeling Patients
Import Between Patients
Modeling State
Auto Log Settings
Reset Model
Save Current State
Load State
Set as Initial State for Current Patient
Reset Initial State

To erase this initial state, go to Auto Mode> Modeling State> Reset Initial State.

AUTO LOG SETTINGS

This menu option is used to specify various vitals that you would like to be logged automatically after reaching a specific threshold.


Auto Log Setting

☑ Auto Log

Common | FHR

Log Vitals when:

Heart Rate changes more than	5	bpm
Systolic BP changes more than	5	mmHg
Diastolic BP changes more than	5	mmHg
Resp Rate changes more than	5	bpm
Insp Percentage changes more than	5	%
EtCO2 changes more than	5	mmHg
Sp O2 changes more than	2	%
Temperature changes more than	1	C

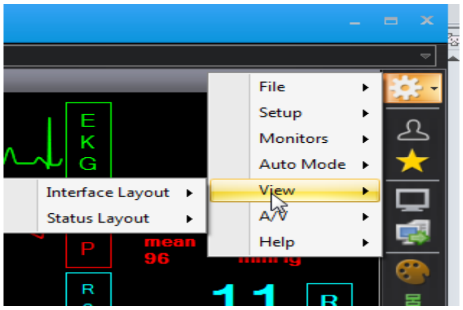
RESET MODEL

Clicking on Reset Model under the Auto Mode drop down menu, will restore all vitals and physiologic controls to normal state. For instance, if the ECG rhythm is currently on Ventricular Fibrillation, clicking on reset model changes the ECG rhythm back to sinus.

VIEW

Modify UNI's modular interface design to accommodate specific simulations or exercises.

For example, a facilitator may prefer to just view certain detail windows, panels and tabs related to scenarios building in order to program scenarios efficiently. Outlined below are the options for customizing the UNI layout.

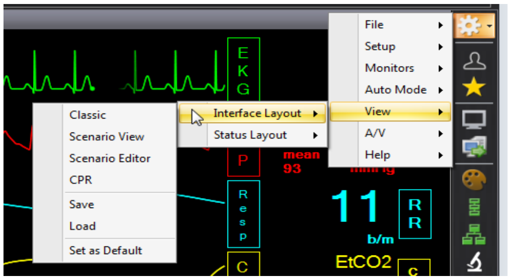

File
Setup
Monitors
Auto Mode
View
A/V
Help
Interface Layout
Status Layout
E
K
G
P
mean
96
R
11
R

INTERFACE LAYOUT

The interface layout refers to the size, position and type of panels and tabs in the UNI environment.

DEFAULT INTERFACE LAYOUT OPTIONS

Change quickly between built-in interface layouts using the View>Interface Layout.


File
Setup
Monitors
Auto Mode
View
A/V
Help
Interface Layout
Status Layout
Classic
Scenario View
Scenario Editor
CPR
Save
Load
Set as Default
E
K
G
P
mean
93
R
e
s
p
11
R
R
b/m
C
EtCO2

CLASSIC

Select the Classic option to revert the layout to the original state built in to UNI.

SCENARIO VIEW

The scenario view layout option only includes tabs and panels useful when working with scenario exercises.

SCENARIO EDITOR

The Scenario Editor includes panels and tabs necessary when building new scenarios.

CPR

The CPR layout allows the facilitator to monitor vital signs and the CPR trainer as the student performs exercises.

CREATING A CUSTOM LAYOUT

To accommodate a specific workflow, edit the size, position and type of panels and tabs in the UNI environment.

SIZE

To adjust the size of a panel, tap-n-hold between the panel seams, then move the cursor to the desired panel size.

POSITION

1. First, tap and hold the panel's title tab or title bar and drag the cursor away to separate the panel from the interface.
2. A floating panel window is another position that may assist facilitators in that undocked panels are always visible on top of the user interface.
3. To dock a floating panel, drag the title bar to any of the docking position icons.
4. To create a tabbed panel, select the middle position icon.

TYPE

First, close the unused panels by clicking on the x located on the panel's title bar.

Then, add the desired panel by tapping the menu sidebar icon located on the right.

SAVE

Select "Save" to store the custom layout. Enter a description and click OK.

LOAD

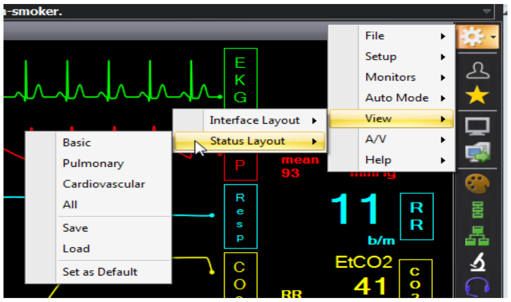
Select Load to access and load any of the layouts previously saved.

SET AS DEFAULT

Use the "Set as default" option to automatically load the current interface layout upon startup.

STATUS LAYOUT

The second layout option is used to modify and store the status/details panel elements. This refers to the model view, detail window positions and parameters.


-smoker.
File
Setup
Monitors
Auto Mode
View
A/V
Help
Interface Layout
Status Layout
Basic
Pulmonary
Cardiovascular
All
Save
Load
Set as Default
E
K
G
P
mean
93
R
e
s
p
11
R
R
b/m
EtCO2
41
C
O
RR

BASIC

Select the Basic option to view common detail window controls.

PULMONARY

To facilitate respiratory exercises, select the pulmonary layout.

CARDIOVASCULAR

Select the Cardiovascular status/details layout to view only parameters relating to cardiac and circulation.

ALL

To view all the detail windows and parameters available, select ALL. If viewing all the controls, it is recommended to expand the size of the status/details panel so the details windows can fit.

SAVE

Select Save to store the custom status layout. Enter a description and click OK.

LOAD

Select Load to access any of the status layouts previously saved.

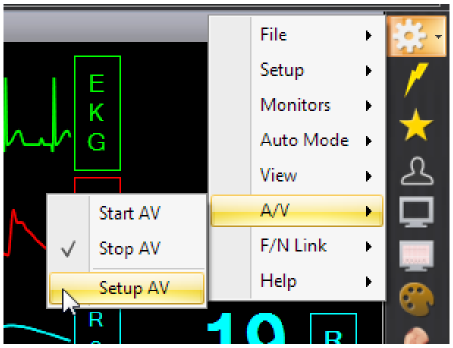
SET AS DEFAULT

Use the "Set as default" option to automatically load the current status layout upon startup..

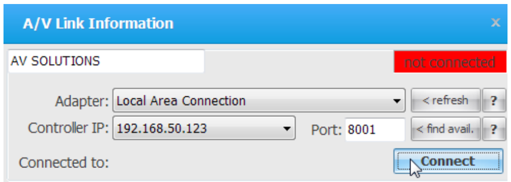
A/V (AUDIO & VIDEO)

UNI is capable of interfacing with a number of third-party A/V recording systems. Generally, A/V solutions capture footage of the simulation and interlace it with the event information generated by the simulator control software.

To enable the fetal Neo link menu option, go to Set Up > Options > Other and checkmark "Use AV System".


File
Setup
Monitors
Auto Mode
View
A/V
F/N Link
Help
Start AV
✓ Stop AV
Setup AV
E
K
G
R
10
R

Click "Setup AV" to configure the software connection to the AV system. Enter a port number for the connection and click “Connect” to establish a link. Please contact the AV administrator for information on how to accept incoming connections from the UNI software.


A/V Link Information
< refresh
?
< find avail.
?
Connect

AV SOLUTIONS
not connected
Adapter: Local Area Connection
Controller IP: 192.168.50.123
Port: 8001
Connected to:

Return to the A/V menu and click “Start AV” to initialize the recorder. Some third party A/V solutions may not recognize the “Start” command generated by the log event. If the recorder does not start remotely, please start the new video manually using the third party controls.

The log event does not command the recording to stop at the end of the scenario automatically. Click Stop A/V from the menu to end the recording.

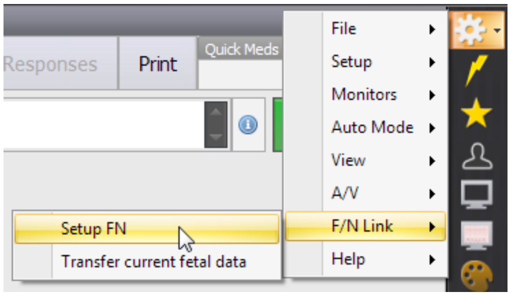
FETAL NEO LINK (AUTO MODE)

The “Fetal Neo Link” transfers the fetal vital signs to the Newborn/Premie Software at end of the delivery. The feature allows the providers to continue simulation using the full featured neonate without interruptions.

HAL FETAL NEO LINK SETUP

To configure the fetal link communication between the HAL and Newborn/Premie computers:

1. Click F/N Link > Setup FN open the Fetal - Neo Link connection menu


Responses
Print
Quick Meds
File
Setup
Monitors
Auto Mode
View
A/V
F/N Link
Help
Setup FN
Transfer current fetal data

2. Set the adapter to “Wireless network connection
3. Enter a port number for the connection and click “Connect”. If the port number is busy, click “Find Available” to scan for an open port.

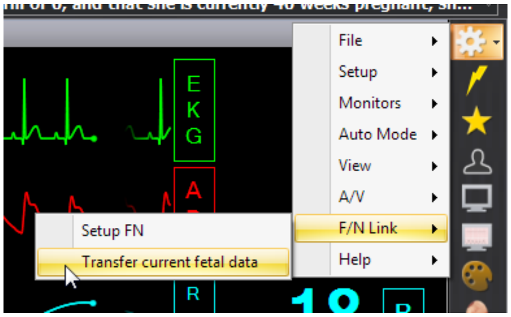
Newborn HAL / Preemie Fetal Neo Link Setup

4. Open the “Setup F/N” menu on Newborn HAL /Premie HAL tablet.
5. Enter the HAL controller IP and the matching port number and then click “Connect”.

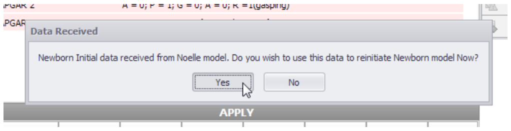
The Fetal Neo Link is now connected. For information on troubleshooting connectivity issues, please reference the Appendix.

USING THE NEO LINK

The fetus vital signs information is transferred at the end of the delivery automatically. Alternatively, click “Transfer current fetal data” to send the information manually.

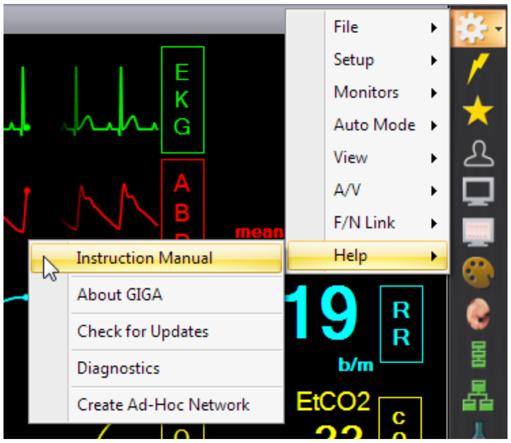

E
K
G
A
R
File
Setup
Monitors
Auto Mode
View
A/V
F/N Link
Help
Setup FN
Transfer current fetal data

A prompt is displayed on the Newborn HAL / Premie software to accept the incoming neonatal vital information. Click “Yes” to load the vital signs information.


Data Received
Yes
No
APPLY

Newborn Initial data received from Noelle model. Do you wish to use this data to reinitiate Newborn model Now?

HELP

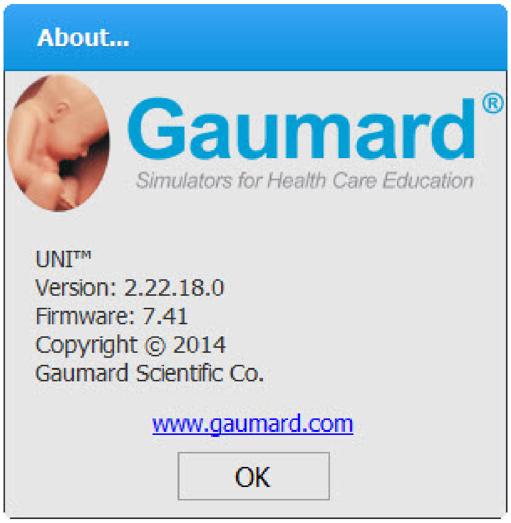

E
K
G
A
B
mean
19
R
R
b/m
EtCO2
File
Setup
Monitors
Auto Mode
View
A/V
F/N Link
Help
Instruction Manual
About GIGA
Check for Updates
Diagnostics
Create Ad-Hoc Network

INSTRUCTION MANUAL

Click the Instruction Manual option to open a digital copy of the latest “User Guide” information.

ABOUT UNI

Click “About GUI” to view the software version.


About...
Gaumard®
Simulators for Health Care Education
OK

UNI™
Version: 2.22.18.0
Firmware: 7.41
Copyright © 2014
Gaumard Scientific Co.

www.gaumard.com

CHECK FOR UPDATES

Redistributable UNI installer files are available for download at http://www.gaumard.com/software-updates/.

To update the UNI software using a flash drive:

1. Download the update file to a flash drive using a computer with internet access
2. Copy the setup file to the simulator’s control computer
3. Run the UNI update file to update the software

Do not change the wireless network settings. Doing so will disconnect the virtual monitor computer and the Gaumard Monitors vital signs software.

To update the UNI software using an Ethernet connection:

1. Connect an Ethernet cable to the laptop PC.
2. Click “Check for Updates”.
3. Click “Install” to begin the update. The download progress bar begins to auto-fill as the setup file is downloaded

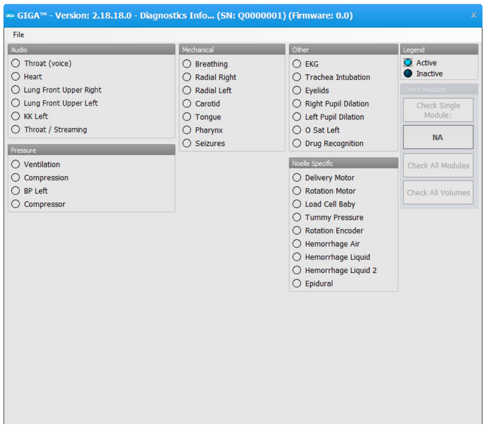
After the download is complete, the update setup wizard is launched automatically.

4. Click “Next”, and follow the wizard to complete the software download.

DIAGNOSTICS

The diagnostics menu is used to test the status of electronic and mechanical components in the simulator.

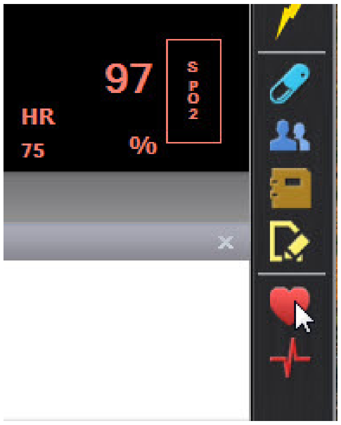
Click “Check all Modules” to run a full systems check. Active modules report blue. Modules that are inactive or not installed report black.


GIGA™ - Version: 2.18.18.0 - Diagnostics Info... (SN: Q0000001) (Firmware: 0.0)
File
Audio
○ Throat (voice)
○ Heart
○ Lung Front Upper Right
○ Lung Front Upper Left
○ KK Left
○ Throat / Streaming
Pressure
○ Ventilation
○ Compression
○ BP Left
○ Compressor
Mechanical
○ Breathing
○ Radial Right
○ Radial Left
○ Carotid
○ Tongue
○ Pharynx
○ Seizures
Other
○ EKG
○ Trachea Intubation
○ Eyelids
○ Right Pupil Dilation
○ Left Pupil Dilation
○ O Sat Left
○ Drug Recognition
Noelle Specific
○ Delivery Motor
○ Rotation Motor
○ Load Cell Baby
○ Tummy Pressure
○ Rotation Encoder
○ Hemorrhage Air
○ Hemorrhage Liquid
○ Hemorrhage Liquid 2
○ Epidural
Legend
● Active
● Inactive
Check Modules
Check Single Module:
NA
Check All Modules
Check All Volumes

Myocardial Infarction Editor (HAL Only)

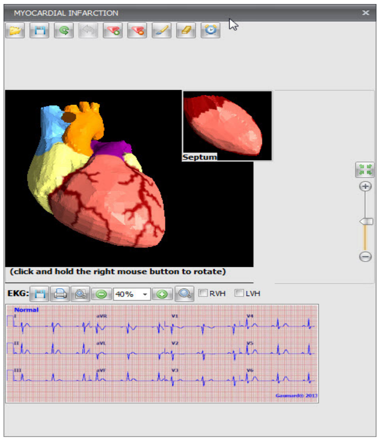
Use the Myocardial infarction editor to create custom myocardial infarctions using an interactive model of the heart. The EKG generated displaying the effects of the MI can be loaded into the simulator so it can be detected using a real EKG monitor.

To access the editor, click on the MI icon located on the side menu bar inside the UNI software



HEART VIEWER

To rotate the heart, click and hold the stylus button, then rotate the heart to the desired position. The zoom control and the reset rotation button are located on the right of the heart view window.



.

MI CONTROLS

Located on the left panel are the MI controls. These tools are used for creating myocardial ischemia, injury and necrosis.

Load

Use the load button to access built in MI models or access previously saved items.

Save

After the MI model is created, click Save to store the new preset to the system..

Reset

The reset MI model button resets all the settings to a healthy state.

Undo/Redo

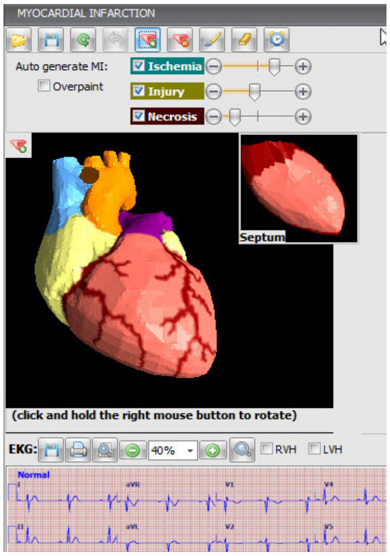
Move one step backward to undo.

Help

Use the help button to access a PDF version of the instruction manual.

ADD OCCLUSION POINT

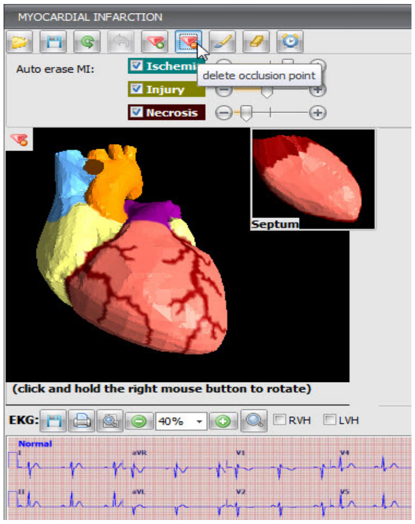
Begin by clicking on the add occlusion point button on the menu. To auto generate MI from an occlusion, select any of the following options: Ischemia, injury and necrosis. The size of each MI type is adjusted by using the slider controls located on the right panel. After the occlusion point properties are set, click the location on the artery where the occlusion point will be generated.


MYOCARDIAL INFARCTION
Auto generate MI:
☐ Overpaint
☑ Ischemia
☑ Injury
☑ Necrosis
Septum
(click and hold the right mouse button to rotate)
EKG:
40%
☐ RVH
☐ LVH
Normal

To create an occlusion point without auto generating MI, deselect the MI types from the menu and select a point on the coronary arteries. Enable over paint to overwrite previous occlusions and MI.

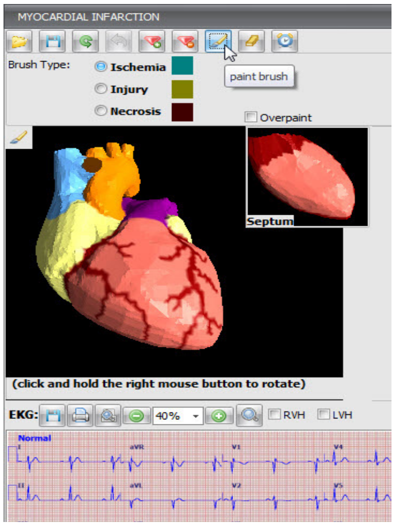
DELETE OCCLUSION POINT

Click on the “delete occlusion point” button and select the green occlusion on the heart viewer using the modified cursor. Deleting an occlusion will also remove any MI that was previously generated.


MYOCARDIAL INFARCTION
Auto erase MI:
☑ Ischemia
☑ Injury
☑ Necrosis
delete occlusion point
Septum
(click and hold the right mouse button to rotate)
EKG:
40%
☐ RVH
☐ LVH
Normal

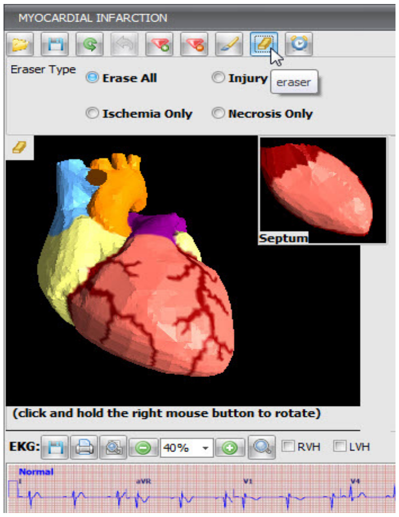
MI PAINT BRUSH

Click on the Paint Brush button to create MI using the modified brush tool.


MYOCARDIAL INFARCTION
Brush Type:
○ Ischemia
○ Injury
○ Necrosis
paint brush
☐ Overpaint
Septum
(click and hold the right mouse button to rotate)
EKG:
40%
☐ RVH
☐ LVH
Normal

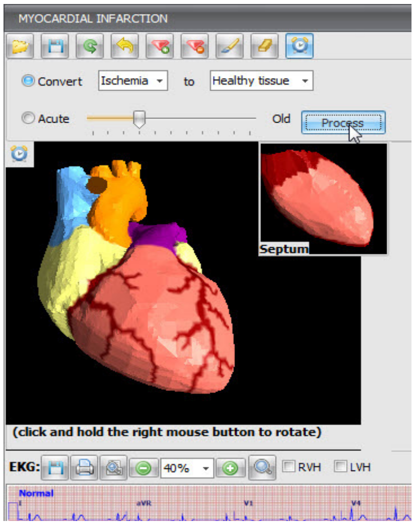
ERASE

Begin by selecting the type of injury that will be erased, then use the modified cursor to delete the injury from the model.


MYOCARDIAL INFARCTION
Eraser Type
○ Erase All
○ Injury
eraser
○ Ischemia Only
○ Necrosis Only
Septum
(click and hold the right mouse button to rotate)
EKG:
40%
☐ RVH
☐ LVH
Normal

TIME PROGRESSION

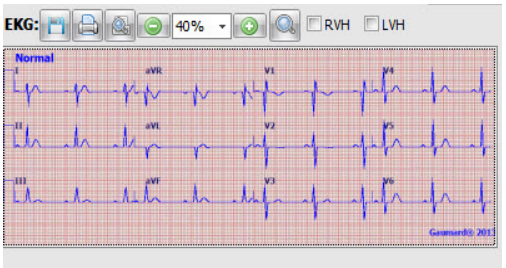
Click on the time progression button to convert the MI or select the secondary control to adjust the age of the infarction. To apply the change, click Process.


MYOCARDIAL INFARCTION
Acute
Old
Process
Septum
(click and hold the right mouse button to rotate)
EKG:
40%
RVH
LVH
Normal

Convert: Ischemia to Healthy tissue

EKG CONTROLS

Once the MI is created, the 12 lead EKG can be saved for use within a palette or a scenario. Use the EKG controls to save, print, preview, zoom and magnify.

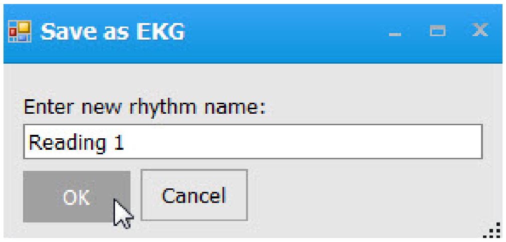

EKG:
40%
RVH
LVH
Normal
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

SAVE EKG

Click the Save EKG button to display the following options.

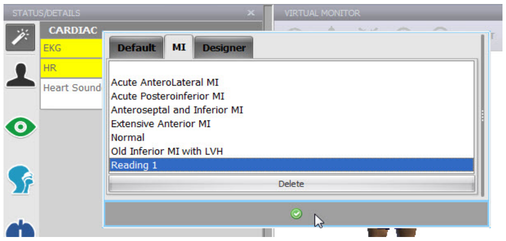
SAVE AS EKG

Choose “Save to Library” then enter a name for the new rhythm in the “Save as EKG” window and click OK.


Save as EKG
OK
Cancel

Enter new rhythm name: Reading 1

The new custom heart rhythm will be available as an option in the EKG physiological parameter control. Once the heart rhythm is selected, it can be incorporated into a palette or applied immediately.

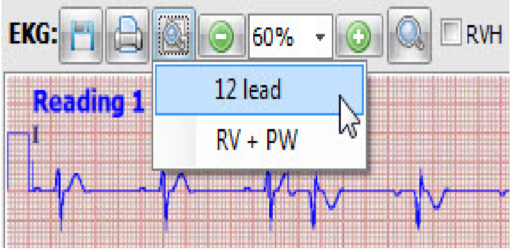

STATUS/DETAILS
VIRTUAL MONITOR
CARDIAC
EKG
HR
Heart Sound
Default
MI
Designer
Acute AnteroLateral MI
Acute Posteroinferior MI
Anteroseptal and Inferior MI
Extensive Anterior MI
Normal
Old Inferior MI with LVH
Reading 1
Delete

SAVE AS IMAGE

Choose Save Image to store a snapshot of the EKG. When prompted, select a location to save the image.

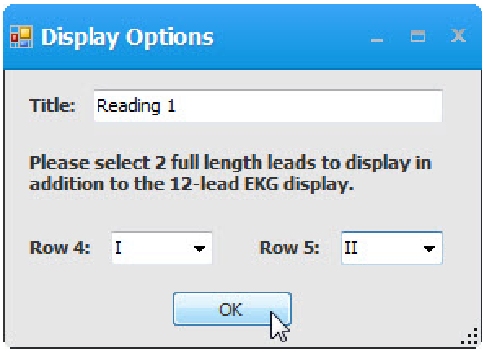
PREVIEW EKG

Use the preview button to display the 12 lead EKG onscreen with an additional 2 full length leads or a preview with RV + PW.


EKG:
60%
RVH
Reading 1
I
12 lead
RV + PW

12 LEAD

Click 12 lead and select two full length leads to display in addition to the 12-leads.


Display Options
OK

Title: Reading 1

Please select 2 full length leads to display in addition to the 12-lead EKG display.

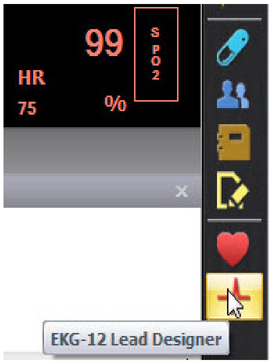
Row 4: I

Row 5: II

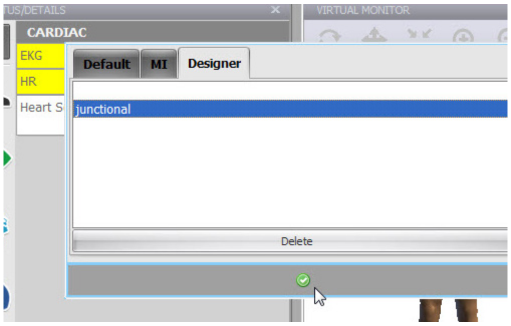
Click OK to display the preview window.

EKG Designer

Use the EKG designer to create a custom 12 lead rhythm. Click the EKG designer button to open the EKG designer window.

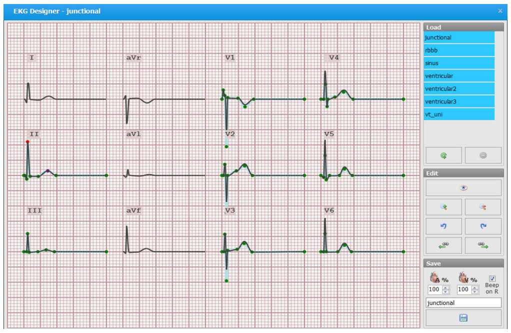

99
HR
75
%
SPO2
EKG-12 Lead Designer

After a rhythm is created and saved, navigate to the designer tab to load the custom rhythm.


US/DETAILS
VIRTUAL MONITOR
CARDIAC
EKG
HR
Heart S
Default
MI
Designer
junctional
Delete

EDITING AND CREATING 12 LEAD RHYTHMS USING THE EKG DESIGNER

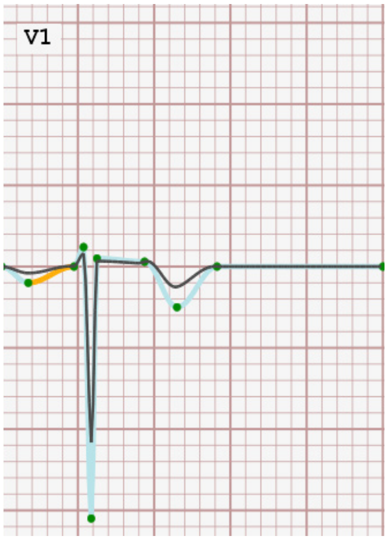
EKG designer starts with a set of flat lines in all waveforms. From this point, new rhythms can be created, or existing rhythms from the UNI library can be edited and saved as new waveforms. Rhythms drawn in the EKG Designer are assumed to be at 60 beats per minute, with any morphology changes as a result of lower or higher rates being automatically handled by the software.


EKG Designer - junctional
I
aVr
V1
V4
II
aVl
V2
V5
III
aVf
V3
V6
Load
junctional
rbbb
sinus
ventricular
ventricular2
ventricular3
vt_uni
Edit
Save
100
100
Beep on R
junctional

To edit an existing rhythm, select it from the Cardiac Rhythms list on the top right hand side of the EKG Designer window. New rhythms can be created by simply adding and manipulating points on the default flat lines of the EKG Designer window.

Once a rhythm is loaded, it can be edited by clicking and dragging the dots on waveforms II, III and V1-V6 In the precordial leads the dots lie on a green line which shows the waveform generated at the site, while the waveform detected at the patient monitor is shown as a thin black line.

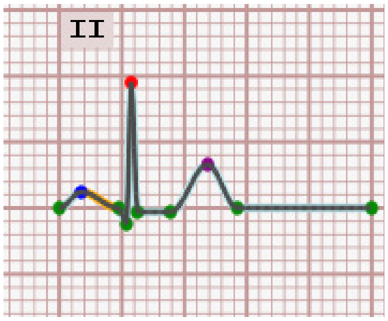
Dots can be added by right clicking on the waveform line, or on the green line for leads V1 through V6. The Preview button in EKG designer hides the editing dots to provide an uncluttered image of the working rhythm.



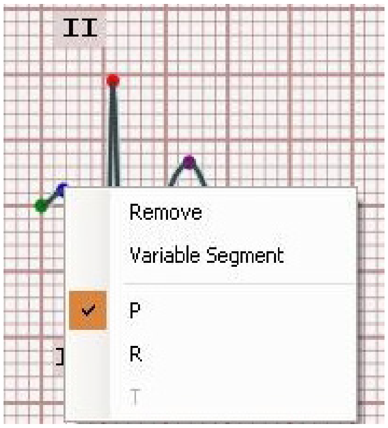
Note that because waveforms I, aVR, aVl and aVf are dependent on lead II, they cannot be edited directly.

HEART SOUNDS TIMING

In order to properly time the heart sounds in custom rhythms, it is necessary that the user identify points P, R and T within the Lead II waveform. These points are colored Blue, Red and Purple, respectively.



In order to identify points P, R and T, right click over the desired point and select the appropriate letter.

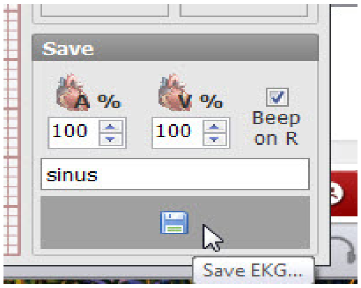

II
Remove
Variable Segment
P
R
T

VARIABLE SEGMENT

A variable segment identifies the line between two points that can be extended and reduced as the heart rate decreases and increases. If present, this segment needs to be identified on all lead waveforms

CONTROL PANEL

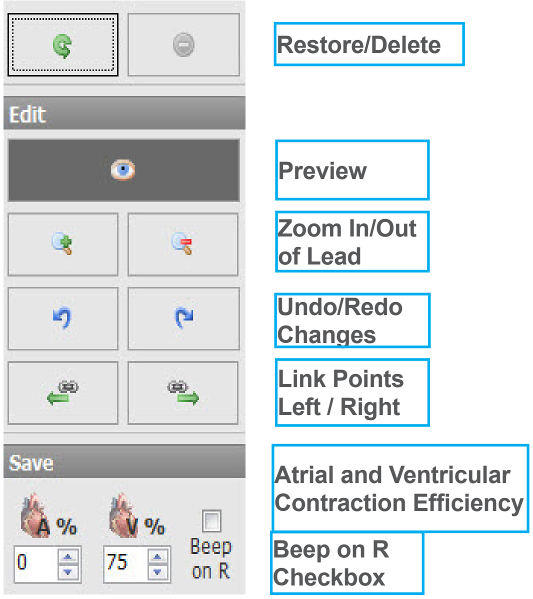
To save a customized rhythm, enter a name in the Save textbox on the right side of the window and click on the Save icon


Save
A %
V %
100
100
Beep on R
sinus
Save EKG...

Rhythms included as part of UNI Module's EKG library cannot be deleted; however, they can be edited. Modified rhythms can be applied directly from the "Designer" tab of the Rhythm Selection window on the Details tab. Changes made to default rhythms can also be rolled back by selecting the desired rhythm and clicking on the Restore button of the EKG Designer window.

EDITING CONTROLS

The Link Points controls can be used to drag sets of points left or right without modifying an existing drawing. This function can be useful to align waveform features (such as QRS complexes) across several lead waveforms.

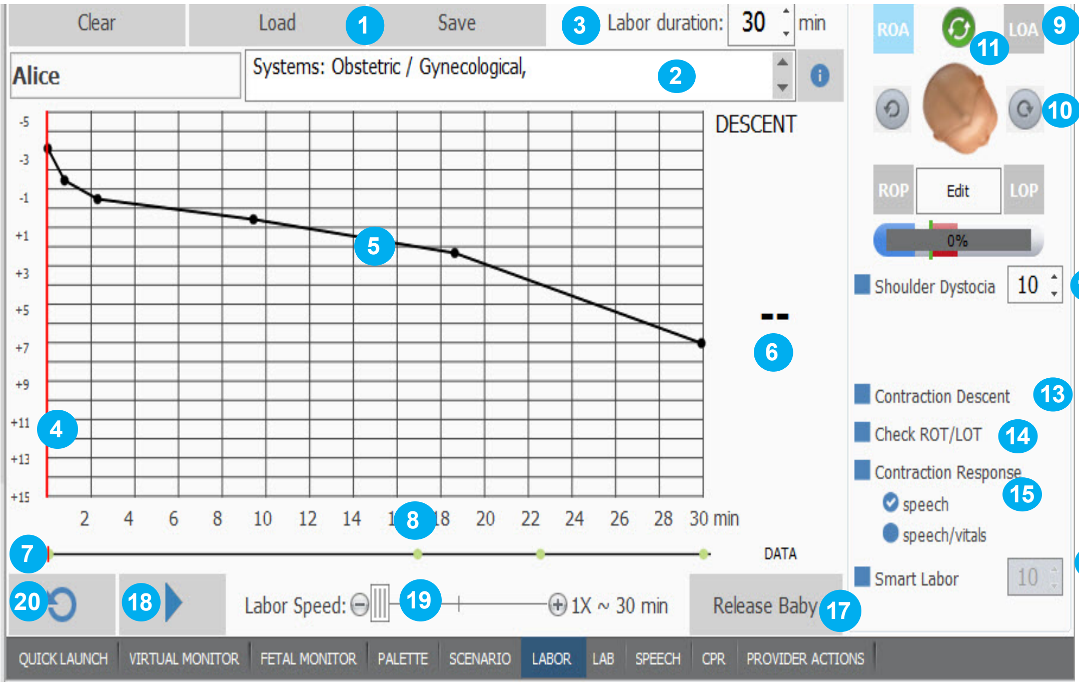

Restore/Delete
Edit
Preview
Zoom In/Out of Lead
Undo/Redo Changes
Link Points Left / Right
Save
Atrial and Ventricular Contraction Efficiency
A %
V %
0
75
Beep on R
Beep on R Checkbox

The Atrial and Ventricular Contraction Efficiency values are used by UNI's Automatic Mode to determine parameters such as blood pressure and oxygenation.

The Beep on R value informs the Gaumard Virtual Monitors (if available) that an EKG beep should occur at the point designated as the R on the Lead II waveform.

Labor (Noelle Only)

The Labor tab is used to program, play, and monitor a labor and delivery scenario. Reference this section to learn more about the programmable features available on the Labor tab. To carry out a labor and delivery simulation exercise, please reference the "Working with NOELLE" directions for use section.



Labor duration: 30 min

Alice

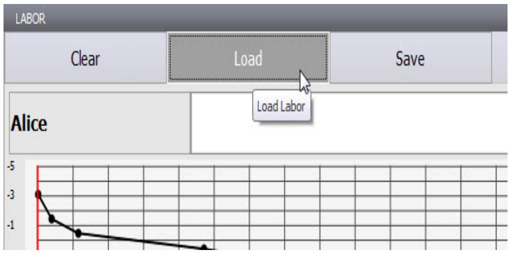
Systems: Obstetric / Gynecological,

Clear
Load
Save
1
3
2
ROA
LOA
9
11
10
ROP
Edit
LOP
0%
Shoulder Dystocia 10
12
DESCENT
-5
-3
-1
+1
+3
+5
+7
+9
+11
+13
+15
5
--
6
4
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min
8
7
DATA
Contraction Descent
13
Check ROT/LOT
14
Contraction Response
15
speech
speech/vitals
Smart Labor 10
16
20
18
Labor Speed:
19
1X ~ 30 min
Release Baby
17
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS

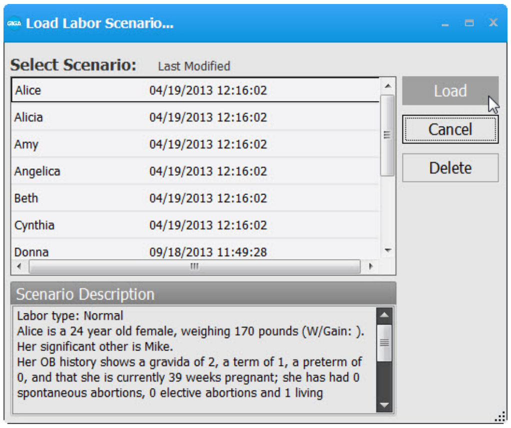
1. Load/save Labor - Click "Load" to select from the preprogrammed labor scenarios.
2. Labor scenario information - Displays the patient name/scenario name and the patient history.
3. Labor duration - The simulated duration of the delivery; from stage one to stage three.
4. Labor progress line - The vertical line moves to the right indicating the progress of the labor scenario.
5. Descent curve - The programmable descent rate of the fetal head relative to the ischial spine
6. Descent station - The position or level of the fetal head relative to the ischial spines
7. Palette time line - Holds palette items in respect to when they occur during the delivery
8. Palette Item - A preprogrammed set of vital signs parameters or speech.
9. Initial Fetal Position - Select the fetus position (ROA, LOA, ROP, LOP) that matches the position of the fetus inside the abdomen.
10. Remote positioning controls - Click the turn controls to rotate the fetus inside the abdomen.
11. Disable Rotation - Turn off the fetus internal and external rotation automatically.
12. Shoulder Dystocia - Turn the dystocia feature on or off and set the station when turtle signs begin show.
13. Check ROT/LOT delivery - Verifies the fetal shoulders are positioned ROT/LOT before disengaging automatically
14. Contraction Descent - Advance the delivery mechanism only during contractions
15. Contraction response - Generate speech responses with every contraction.
16. Smart labor - Run labor palette items for the time specified regardless of the speed increase.
17. Manual release - Click the release button to disengage the baby from the motor arm
18. Play/Pause - Click play to start the scenario and activate the delivery mechanism
19. Labor speed - Adjust the labor speed to simulate the labor scenario in a fraction of the time. For example, increase the speed to complete a 30-minute labor scenario in 2 minutes.
20. Reset - Reset the motor back to the starting position at the end of the delivery

LABOR SCENARIOS

Preprogrammed labor scenarios are included in the “Quick Start NOELLE and “NOELLE Advanced” profiles. To load a labor scenario, go to the labor tab and click the “Load Labor” button.



The “Load Labor Scenario...” menu is displayed. Scroll through the list of labor scenarios available. Every preprogrammed scenario includes a scenario description. Select a labor scenario and click “Load” to continue.



Select Scenario:

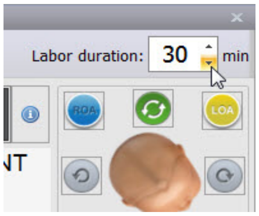
	Last Modified
Alice	04/19/2013 12:16:02
Alicia	04/19/2013 12:16:02
Amy	04/19/2013 12:16:02
Angelica	04/19/2013 12:16:02
Beth	04/19/2013 12:16:02
Cynthia	04/19/2013 12:16:02
Donna	09/18/2013 11:49:28

Scenario Description

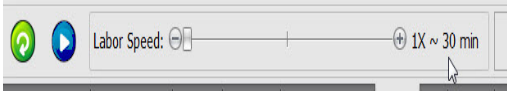
Labor type: Normal
Alice is a 24 year old female, weighing 170 pounds (W/Gain:).
Her significant other is Mike.
Her OB history shows a gravida of 2, a term of 1, a preterm of 0, and that she is currently 39 weeks pregnant; she has had 0 spontaneous abortions, 0 elective abortions and 1 living

LABOR DURATION

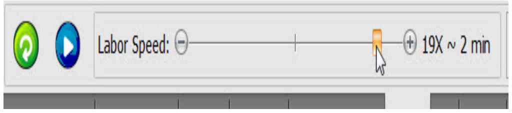
The labor duration refers to the simulated duration of the labor scenario from beginning to end.



The approximate duration of the labor in real time is displayed near the labor speed slider.



The system can complete a lengthy labor scenario in a fraction of the time. Use the slider to increase the labor progress speed. In this example, the entire 30-minute labor scenario will be completed in approximately 2 minutes (real time).

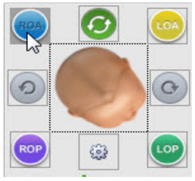


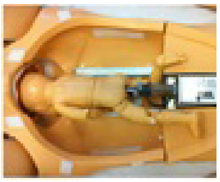
INITIAL POSITION SYNCHRONIZATION

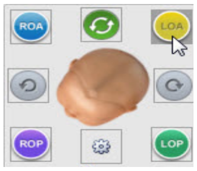
The birthing mechanism simulates internal and external rotations from any of four initial positions: ROA, LOA, LOP and ROP. Each of the position’s rotation routine is preprogrammed to result in the vertical delivery of the fetal shoulders (ROT/LOT).

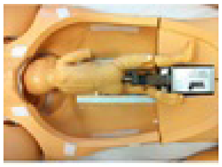
During the delivery setup process, adjust the position of the fetus in the abdomen to one of the four initial positions. Then, on the Labor tab, select the initial position option that matches the fetus in the abdomen. See the figure below for an example of the four initial positions with the matching option selected on the Labor tab.

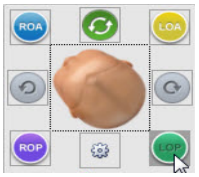
A mismatch between the initial position of the fetus in the abdomen and the position selected in the software will result in incorrect internal and external rotations. When the initial position is not synchronized, the fetal shoulders may deliver horizontally; adding strain to the birth canal material.

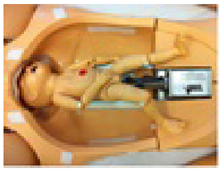

ROA
LOA
ROP
LOP

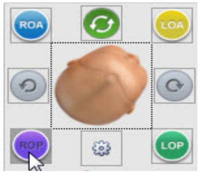


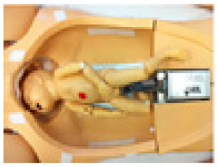

ROA
LOA
ROP
LOP




ROA
LOA
ROP
LOP

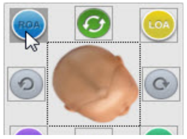


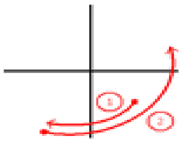

ROA
LOA
ROP
LOP

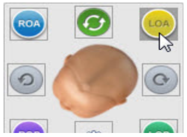


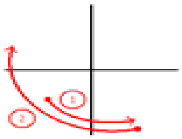
INTERNAL AND EXTERNAL ROTATIONS

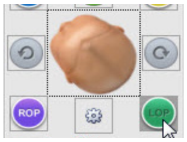
Each initial position is preprogrammed with an internal rotation and the external rotation routine. See an example of the direction of each rotation in the figure below. The red curves illustrate the rotation of the fetus within the abdomen. The internal rotation is marked as “1” and the external rotation marked as “2”.

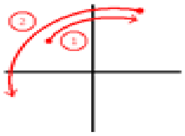


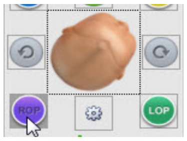


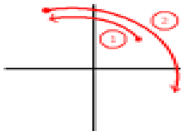






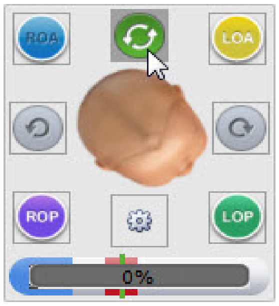






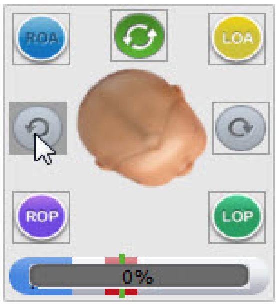
DISABLE ROTATION

The “disable rotation” option turns off the fetal rotation. The fetus can still be rotated remotely using the rotation controls.


ROA
LOA
ROP
LOP
0%

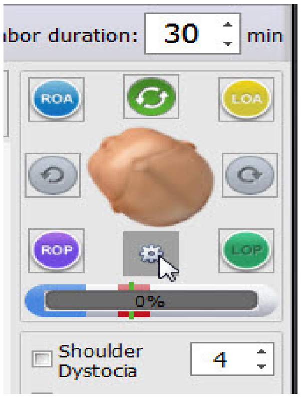
REMOTE POSITIONING CONTROLS

Click the turn controls to rotate the fetus inside the abdomen as shown below.


ROA
LOA
ROP
LOP
0%

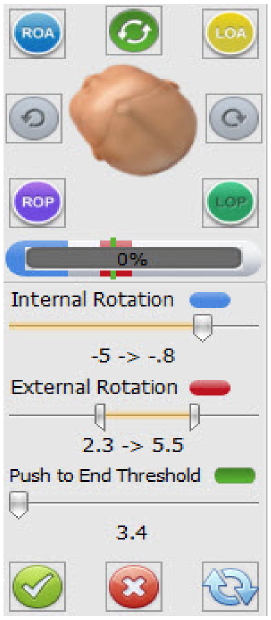
EDITING ROTATIONS

The start and end of each rotation routine can be customized to simulate a specific rotation behavior. Click the “Edit” button to view and edit the rotation configuration for each initial position.


bor duration: 30 min

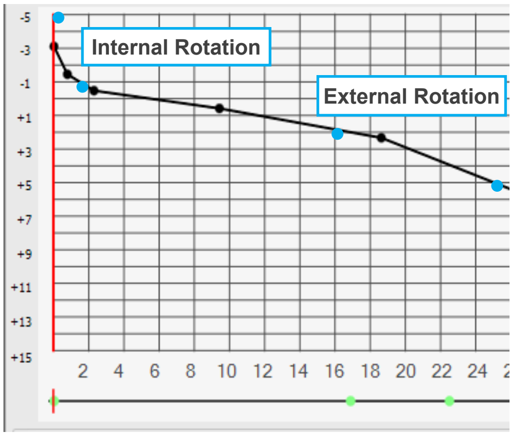
☐ Shoulder Dystocia 4
ROA
LOA
ROP
LOP
0%

The start and end of each rotation routine is configured using the “Station” menu. On the figure below, the internal rotation is programmed to start when the progress line intersects the descent curve at station −5 and end when it crosses station −0.8; use the slider to change to end of the internal rotation. The external rotation is programmed to occurs later in the descent starting at station +2.3 and ending at +5.5; use the slider to change the start and end of the external rotation

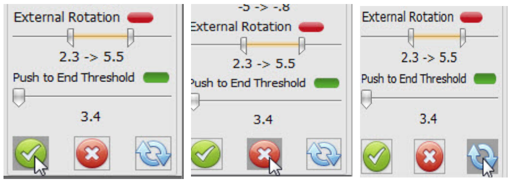


Internal Rotation
-5 -> -.8
External Rotation
2.3 -> 5.5
Push to End Threshold
3.4

Edit the rotation values to customize where the rotations will occur during the descent. The software will not allow the rotations to overlap. The station settings apply to all the labor scenarios. In the figure below, the internal and external rotation station settings are applied to the "Alice" scenario.



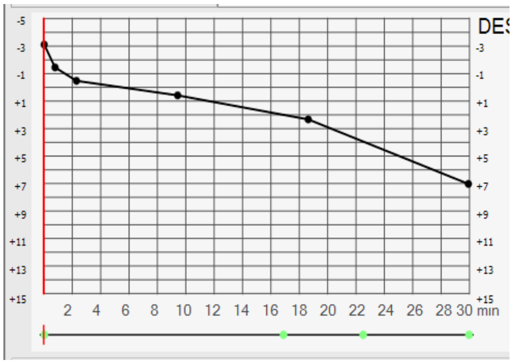
There are configurable presets for all four initial positions. Click the "Apply" button to save the changes. Customized values remain saved even after a software restart. Click cancer to abort the changes selected. Click "Reset" to return all Stations and rotation degrees to factory defaults.



External Rotation
2.3 -> 5.5
Push to End Threshold
3.4

LABOR GRAPH

The labor graph displays the information required to monitor the movement of the fetus during delivery. The graph is also interactive

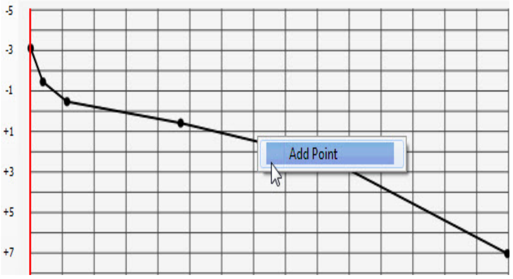


DESCENT STATION

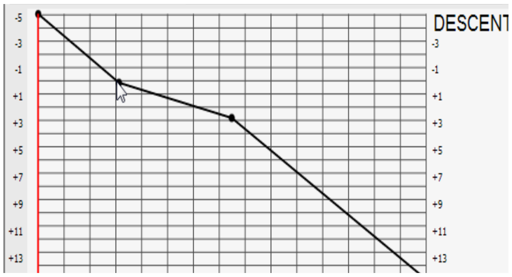
The numerical values in the horizontal axis represent the labor station. These measurements are an approximation.

DESCENT CURVE

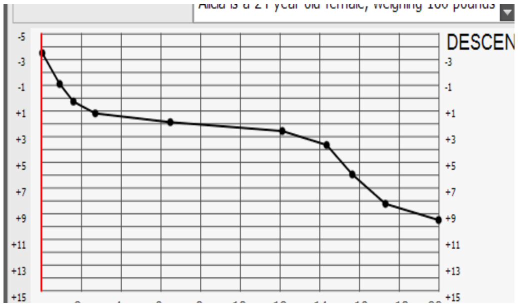
The descent curve represents the position of the fetal head relative to the ischial spines in centimeters, from −5 cm to +10 cm (station). "Right-click" on the line and add a point where the descent rate should change.



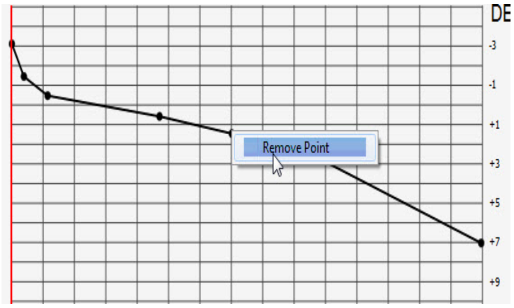
Tap and hold the point and move it to adjust the descent curve.


DESCENT
-5
-3
-1
+1
+3
+5
+7
+9
+11
+13

Add more points on the line to simulate variations in the descent rate.

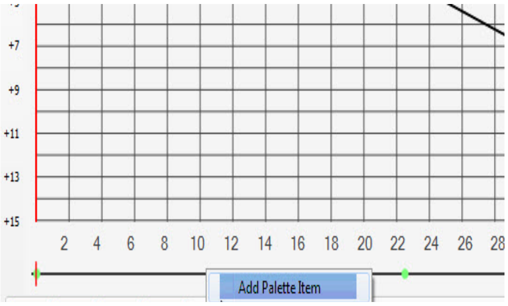

DESCEN
-5
-3
-1
+1
+3
+5
+7
+9
+11
+13
+15

To delete a point from the line, right-click over the point and select "remove point".

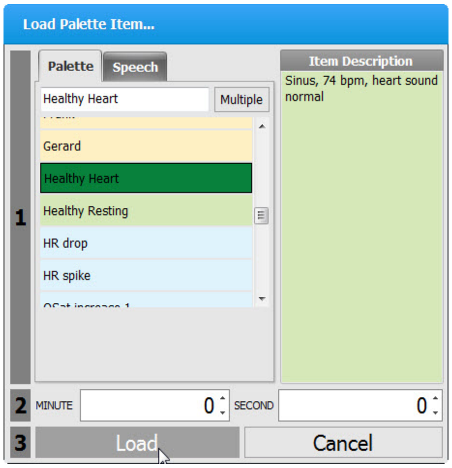

DE
Remove Point
-3
-1
+1
+3
+5
+7
+9

PALETTE TIME LINE

The time line is where Palette Items are placed to change the patient's vital signs during the scenario. As the progress line moves to the right, it loads every palette item it passes over. To add a palette item to the time line, right-click on the time line and select "Add Palette".


+7
+9
+11
+13
+15
2
4
6
8
10
12
14
16
18
20
22
24
26
28
Add Palette Item

The add palette item windows is displayed. Select a palette item to change the patient's vital signs, a preprogrammed speech item, or a file. Set the transition time and then click "Add".

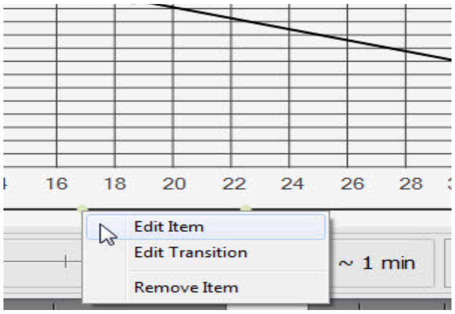

Load Palette Item...

Item Description: Sinus, 74 bpm, heart sound normal

MINUTE 0 SECOND 0
Palette
Speech
Healthy Heart
Multiple
Gerard
Healthy Heart
Healthy Resting
HR drop
HR spike
1
2
3
Load
Cancel

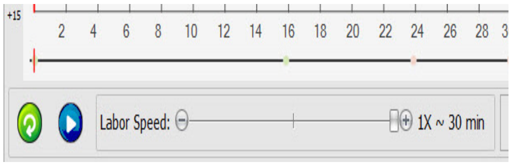
Once the point has been added, you can touch it with the stylus and drag it to the desired location on the time line. Double-click over the point to bring up a window displaying the properties of the Palette Item represented by the point.

To remove or edit a palette item from the time line, right click over the point and select the desired option.


16
18
20
22
24
26
28
Edit Item
Edit Transition
Remove Item
~ 1 min

LABOR CONTROLS

Use the labor controls to run, pause, speed up, and reset the labor scenario.



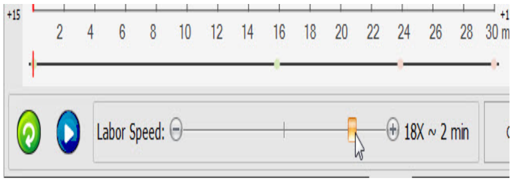
Labor Speed: 1X ~ 30 min

The "Play" button starts the labor scenario and initializes the delivery mechanism. The play button is also used to pause the scenario. Reference the "Working with Noelle" section for step-by-step walkthrough on how to complete a labor scenario.

WARNING

Do not start the labor scenario until reading "Working with NOELLE" and the "Care and Cautions" sections of this guide. Damage caused by improper use is not covered under warranty. .

Use the Labor Speed slider to adjust the labor speed without affecting the simulated labor duration. For example, increase the speed to complete the simulation of a 30-minute labor in 2 minutes real time.



Labor Speed: 18X ~ 2 min

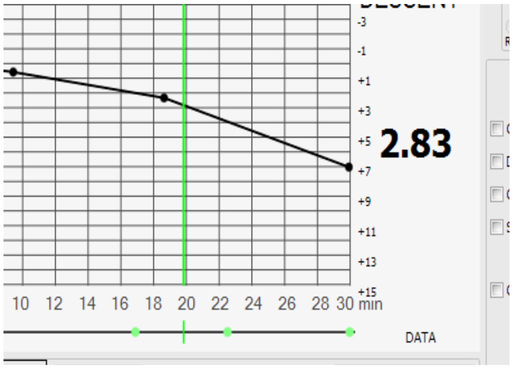
The "Reset" button returns the delivery mechanism to the starting position after the delivery is completed.

WARNING

Do not reset the delivery mechanism while the fetus is still attached to the motor arm. Retracting the fetus into the birth canal may result in damage to the birth canal and the fetus.

PROGRESS LINE

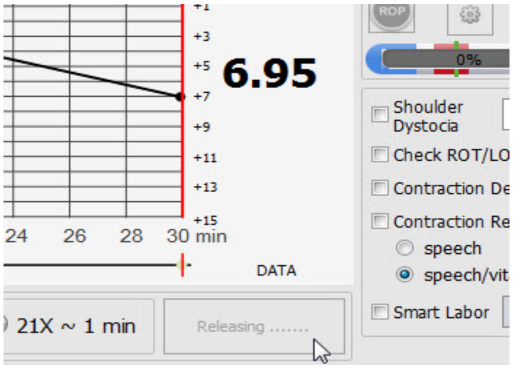
The vertical progress line moves to the right when the labor scenario is started. The progress line intersects the descent curve and the time line. Palette items placed on the time line are triggered when the progress line passes over them.



LOCKING MECHANISM AND RELEASE

The birthing mechanism arm attaches and locks into the fetus attachment port. The motor arm low voltage cable feeds power to the locking mechanism and fetal heart tones speaker inside the fetus. There is one actuation of the locking mechanism when the articulating baby is inserted.

The fetus is unlocked from the birthing mechanism when the vertical progress bar reaches the end of the graph. The automatic unlock process is indicated by the "Releasing…" status on the software a final push.



☐ Shoulder Dystocia
☐ Check ROT/LO
☐ Contraction De
☐ Contraction Re
○ speech
● speech/vit
☐ Smart Labor

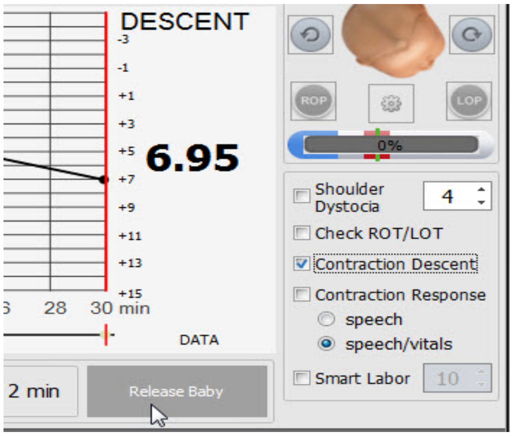
21X ~ 1 min
Releasing ....

WARNING

Guide the baby out of the birth canal by gently pulling in line with the birthing mechanism. Pulling the baby upward or downward in contrast to the birthing mechanism's linear trajector, may bend the motor arm and cause damage to the birthing mechanism.

The fetus will not be unlocked automatically if the "Shoulder Dystocia" feature is activated. If the Shoulder dystocia feature is active, click the

“Release baby” button to disengage the fetus manually.

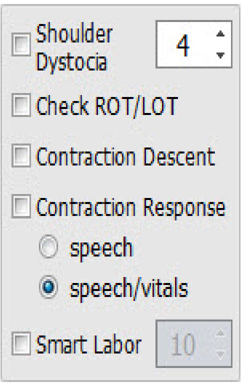


☐ Shoulder Dystocia 4
☐ Check ROT/LOT
☑ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

The locking mechanism features an automatic safety release to prevent users from damaging the system. Go to the appendix to troubleshoot issues related to the unlocking and releasing process.

ADDITIONAL LABOR FEATURES

The additional behavior options add realism to the labor scenario.

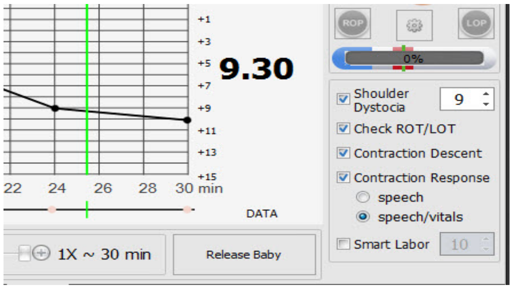


☐ Shoulder Dystocia 4
☐ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

SHOULDER DYSTOCIA

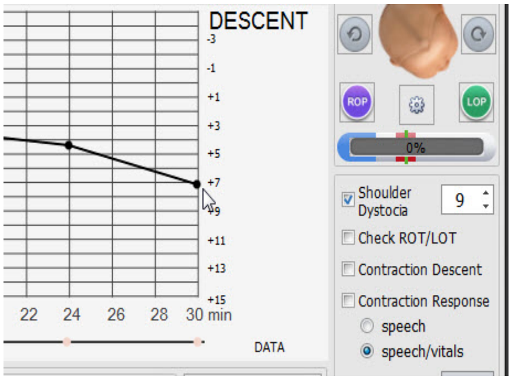
Enable the shoulder dystocia feature to display the retraction of the fetal head during the delivery. Turtle signs are displayed with every contraction that occurs after the progress line passes the dystocia station. The shoulder dystocia behavior occurs in real time regardless of the speed increase.

In the Cynthia labor scenario, the shoulder dystocia is programmed to start at station 9. There will be a turtle sign with every contraction occurring after station 9 at 24 minutes, until the end of the delivery at the 30-minute mark. Recall that the contraction frequency is programmed into the palette items set on the palette item line.



☑ Shoulder Dystocia 9
☑ Check ROT/LOT
☑ Contraction Descent
☑ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

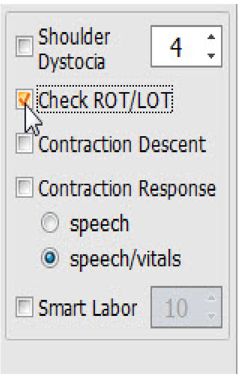
Always adjust the decent curve or the station, so the delivery mechanism has time to simulate the turtle signs. In addition, configure the descent curve so there is ample time during the dystocia for several contractions. In the figure below, the shoulder dystocia feature is active but the descent curve never passes the shoulder dystocia station. The configuration will not result in visible turtle signs.



☑ Shoulder Dystocia 9
☐ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals

CHECK ROT/LOT DELIVERY

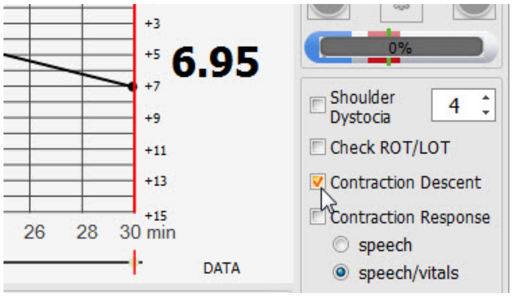
This option Verifies the fetal shoulders are positioned ROT/LOT before disengaging automatically



☐ Shoulder Dystocia 4
☑ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

CONTRACTION DESCENT

Check mark the “Contraction descent” option so the delivery mechanism descends only during contractions.


+3
+5
6.95
+7
+9
+11
+13
+15
26
28
30 min
DATA
0%

☐ Shoulder Dystocia 4
☐ Check ROT/LOT
☑ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals

CONTRACTION RESPONSE

The contraction response option generates changes to the maternal vital signs or speech on every contraction automatically. The contraction response feature simulates patients treated with or without pain medications. When the feature is active, vital signs parameters increase for the duration of the contraction only. The maternal vital signs adjust back to the previous vital signs setting at the end of the contraction.

Selection	Speech	Speech/vitals
Maternal Vital Signs Changes	No Changes	Increase HR, BP, and RR
Audio Palettes	“I think I’m having contractions”	“Ouch,” “Ahhh,” “Please, I need something for the pain,” “Please give me an epidural.”
Notes	Simulates a patient that is pain-controlled	Simulates a patient that is NOT pain-controlled

SMART LABOR

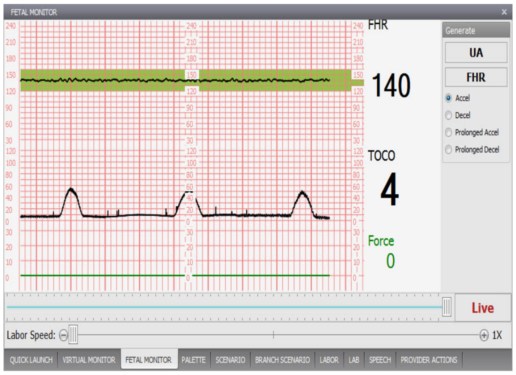
The smart labor option adjusts the labor speed so all the non-speech palettes occur in real time. Set the timer to configure the number of seconds each new palette should play in real time. The labor will resume to the adjusted labor speed after the smart labor time expires.

FETAL MONITOR

UNI displays feedback data recorded by the delivery mechanism sensors. Manipulating the fetus during the delivery prompts the “Activity on Fetus” window to appear on the tablet screen. The window provides feedback on pull force, uterine contractions, torque on the baby (twisting force), and shoulder position.

The labor activity information can assist in determining if the participant is applying too much pull force during the delivery. The information displayed should only be used as reference. The instructor must provide the information on proper technique to the participant.

- Uterine Activity - contractions generated by NOELLE.
- Peak Force - approximate measurement of how hard the provider is pulling the fetus.
- Slider - Rewind the strip to see the previous graph data.

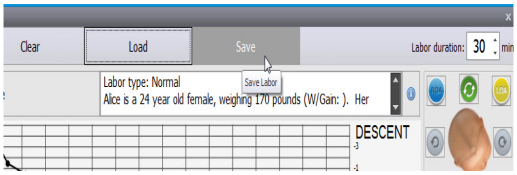

FETAL MONITOR
FHR
140
TOCO
4
Force
0
Generate
UA
FHR
● Accel
○ Decel
○ Prolonged Accel
○ Prolonged Decel
Live
Labor Speed:
1X
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS

Labor Speed - Use the labor speed slider to increase the labor progress speed.

This labor speed is synchronized with the labor speed option from the “Labor” page.

SAVE LABOR

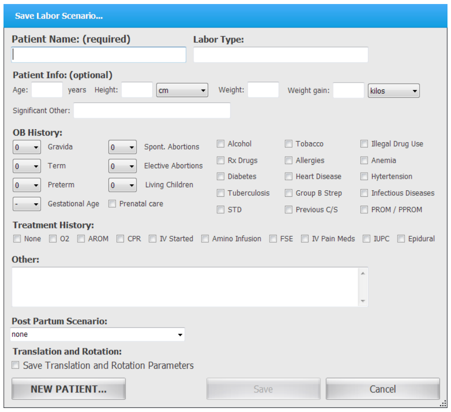
Click the “Save Labor” button to store the current labor configuration and options as a new scenario.


Clear
Load
Save
Save Labor
DESCENT

Labor duration: 30 min

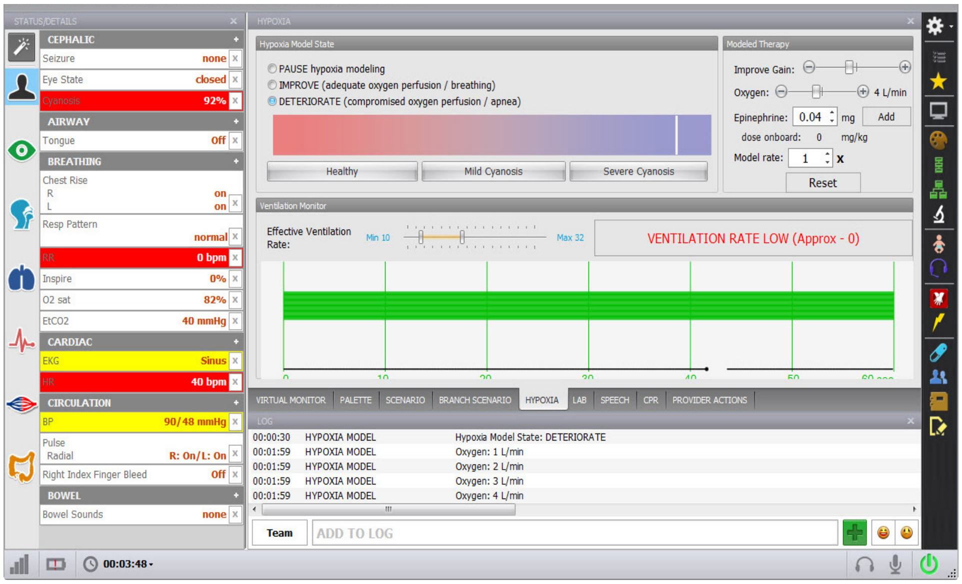
Labor type: Normal
Alice is a 24 year old female, weighing 170 pounds (W/Gain:). Her

The “Save Labor Scenario…” window is displayed. Type in Patient’s name and the patient information in the blank fields and click Save.


Save Labor Scenario...
Patient Name: (required)
Labor Type:
Patient Info: (optional)
Age:
years
Height:
cm
Weight:
Weight gain:
kilos
Significant Other:
OB History:
0 Gravida
0 Term
0 Preterm
- Gestational Age
0 Spont. Abortions
0 Elective Abortions
0 Living Children
☐ Prenatal care
☐ Alcohol
☐ Rx Drugs
☐ Diabetes
☐ Tuberculosis
☐ STD
☐ Tobacco
☐ Allergies
☐ Heart Disease
☐ Group B Strep
☐ Previous C/S
☐ Illegal Drug Use
☐ Anemia
☐ Hytertension
☐ Infectious Diseases
☐ PROM / PPROM
Treatment History:
☐ None ☐ O2 ☐ AROM ☐ CPR ☐ IV Started ☐ Amino Infusion ☐ FSE ☐ IV Pain Meds ☐ IUPC ☐ Epidural
Other:
Post Partum Scenario:
none
Translation and Rotation:
☐ Save Translation and Rotation Parameters
NEW PATIENT...
Save
Cancel

Modeling (Pediatric/Newborn/Premie)

Use the Hypoxia tab to evaluate the effectiveness of provider intervention on an apneic patient. The model adjusts the cardiac, oxygen saturation, and cyanosis dynamically in response to effective ventilations. The model also responds to the administration of epinephrine and oxygen.


STATUS/DETAILS
HYPOXIA
Hypoxia Model State
Healthy
Mild Cyanosis
Severe Cyanosis
Modeled Therapy
Add
Reset
Ventilation Monitor
0
10
20
30
40
50
60 sec
VIRTUAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
HYPOXIA
LAB
SPEECH
CPR
PROVIDER ACTIONS
LOG
Team
ADD TO LOG
00:03:48

CEPHALIC
Seizure: none
Eye State: closed
Cyanosis: 92%

AIRWAY
Tongue: Off

BREATHING
Chest Rise R: on
Chest Rise L: on
Resp Pattern: normal
RR: 0 bpm
Inspire: 0%
O2 sat: 82%
EtCO2: 40 mmHg

CARDIAC
EKG: Sinus
HR: 40 bpm

CIRCULATION
BP: 90/48 mmHg
Pulse Radial: R: On/L: On
Right Index Finger Bleed: Off

BOWEL
Bowel Sounds: none

○ PAUSE hypoxia modeling
○ IMPROVE (adequate oxygen perfusion / breathing)
● DETERIORATE (compromised oxygen perfusion / apnea)

Improve Gain:
Oxygen: 4 L/min
Epinephrine: 0.04 mg
dose onboard: 0 mg/kg
Model rate: 1 x

Effective Ventilation Rate: Min 10 Max 32

VENTILATION RATE LOW (Approx - 0)

```
00:00:30   HYPOXIA MODEL   Hypoxia Model State: DETERIORATE
00:01:59   HYPOXIA MODEL   Oxygen: 1 L/min
00:01:59   HYPOXIA MODEL   Oxygen: 2 L/min
00:01:59   HYPOXIA MODEL   Oxygen: 3 L/min
00:01:59   HYPOXIA MODEL   Oxygen: 4 L/min
```

HYPOXIA MODEL STATE

The hypoxia model options improve or deteriorate the cardiac and respiratory vital signs gradually.

- Pause - Model will pause at the current state.
- Improve - Trend the vital signs to a healthy state.
- Deteriorate - Trend the vital signs to a severe cyanotic state. Ventilations are detected when the respiratory rate is at 0.

CYANOSIS LEVELS

Select the cyanosis level to move to any of the following states immediately:

- Healthy - Pedi is pink with adequate oxygenation.
- Mild Cyanosis - Pedi is slightly blue, and the vital signs are starting to deteriorate.
- Severe Cyanosis - Pedi is blue, apneic, and vital signs are rapidly worsening.

MODELED THERAPY

The modeled therapy menu provides additional intervention options.

Improve Gain - Adjust the slider to increase or decrease the cyanotic response to ventilations.

Oxygen - Adjust the slider to administer oxygen to the fetus in liters per minute.

Epinephrine - Administer epinephrine to the model. Set the epinephrine dose and then click “add”. Administering epinephrine increases the heart rate.

Reset - Click “Reset” to clear the oxygen flow and the epinephrine dose onboard.

Appendix

Scenarios Planning

THINKING IN TERMS OF PALETTE ITEMS

As described previously, palette items represent complete or partial groups of settings that have been stored as a single item. Applying partial states will hold constant all settings that are left unspecified.

Not only does it take time to customize the palette, but a very large palette becomes difficult to navigate. So, it is desirable to minimize the number of Palette Items in each Profile. To accomplish this, an experienced facilitator tries to create items that are as generally applicable as possible and can therefore be applied to a wide range of scenarios. The key is to include only in your palette items the settings that are directly related to the physiological event represented by that palette item.

SMART SCENARIOS

After reading the Details, Palette, and Scenarios sections of this guide, it should be clear how to build a scenario. You may have already tried building your own or modifying some of the factory presets. The following four guidelines will refine your ability to build the best possible scenarios.

1. How will the scenario begin?

The first thing to consider is the initial condition of the patient. Create a Palette Item to describe this condition. Make sure that this first step in the scenario is a complete state. That is, indicate some selection for each available setting on the Details page. Remember that only the settings you specify will cause a change in NOELLE, and all other settings will remain constant. Therefore, by starting with a complete state, NOELLE's condition will always be the same when the scenario starts, regardless of what she was doing previously.

Likewise, the "transition duration" of the first step in the scenario should be zero, indicating that changes are applied immediately.

There is one point that can cause confusion and warrants further explanation. It is an extension of the above discussion of partial states. The issue is best illustrated through the following example:

Suppose that you are creating a Palette Item to start your scenario. In this case, you have decided that the patient will be apneic. The question is, "How should the lung sounds be set?"

Most people's first inclination is to set the lung sounds to "none." This is incorrect, despite apnea. Obviously, no lung sounds should be heard during apnea, but since you have already set respiratory rate to zero, none will be. (Sounds are synchronized to the breathing cycle.)

What you are really setting here when you choose a lung sound is the condition of the lungs, given respiratory drive. That is, if the patient's respiratory rate were changed from zero, what sound would be heard? Assuming that the lungs themselves are normal in this scenario, you would choose "normal" for the lung sound setting.

Then, as the scenario progresses, if the patient starts breathing, there will be no need to set the lung sound again. It will already be set. The same principle applies to the heart sound and other settings.

2. Include notes to guide the facilitator during the simulation.

It is common for scenario designers, especially those who act as facilitators, to neglect the importance of notes in the scenario. They think that they will remember the learning objectives, patient history, and other details at the time they are ready to conduct the simulation. They usually do not, especially when revisiting a scenario months after creating it.

When you add "Wait" and "Wait Indefinitely" steps to a scenario, you have an opportunity to edit the item description. Use this description field to hold notes to the facilitator. Typically, scenario designers write notes in that space to indicate what the provider(s) or facilitator should be doing at that point.

Further, when saving the scenario, you may edit the scenario description. This is the best place to put patient history and any other longer notes and instructions.

3. Assume that providers will do the right thing.

Usually a scenario should be created with the assumption that the providers will perform correctly. As long as they do, the scenario can be allowed to continue.

Naturally, preparation must be made for what might happen to NOELLE when providers deviate from expectations. The consequences of such deviations can sometimes be included in the scenario, punctuated by “Wait Indefinitely” items. In other cases, the simulation will require more direct control by the facilitator via either the Palette or Details page.

4. Choose auto-response settings based on the scenario content and the objectives.

As seen, auto-responses can be used to free the facilitators’ attention. They also enhance realism by presenting instant reactions to the care providers. On the other hand, sometimes it is not possible or desirable to determine the responses before the simulation begins. Different environments and applications call for different settings.

Some teaching practices are best done with the auto-response settings in Prompt mode. Responses must be triggered by a vigilant facilitator. Though it is slower and requires more attention, the benefit of Prompt over other modes is that the simulation can be allowed to go in any direction, and it will be possible to choose the response on a case-by-case basis.

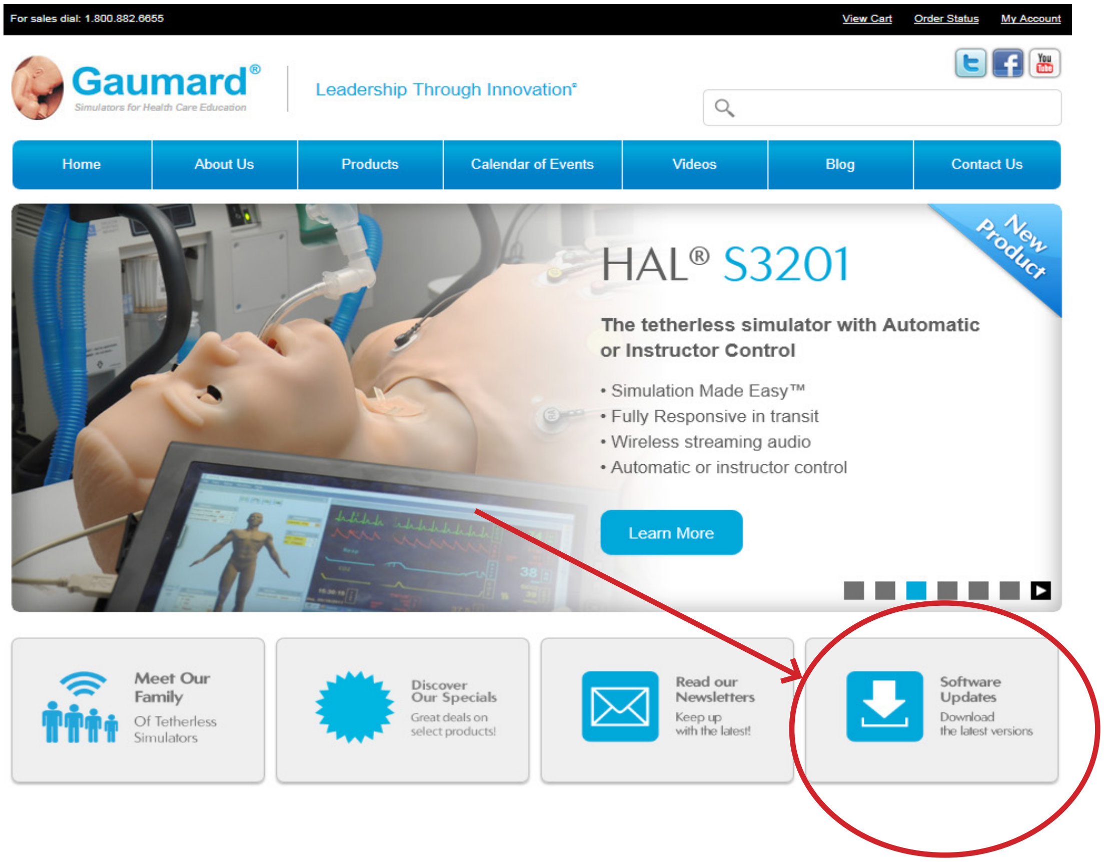
Other learning exercises require a higher degree of automation. For such applications, most facilitators choose Auto mode for the auto-response settings. The key issue is standardized timing of symptom presentation. A consistent, repeatable simulation is essential for fair assessment of that care provider in relation to others and for the broader interpretation of results in the context of training validation studies.

When in doubt, it is best to choose Prompt mode, in which the facilitator will be given direct control of the responses as events are detected.

Pro+ System Offline Updater (If Applicable)

INSTRUCTIONS FOR USE

1. Head to www.Gaumard.com
2. Click the Software Updates button located on the middle right, under the slideshow.


For sales dial: 1.800.882.6655
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Order Status
My Account
Gaumard®
Simulators for Health Care Education
Leadership Through Innovation®
Home
About Us
Products
Calendar of Events
Videos
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Contact Us
New Product
HAL® S3201
The tetherless simulator with Automatic or Instructor Control
• Simulation Made Easy™
• Fully Responsive in transit
• Wireless streaming audio
• Automatic or instructor control
Learn More
Meet Our Family
Of Tetherless Simulators
Discover Our Specials
Great deals on select products!
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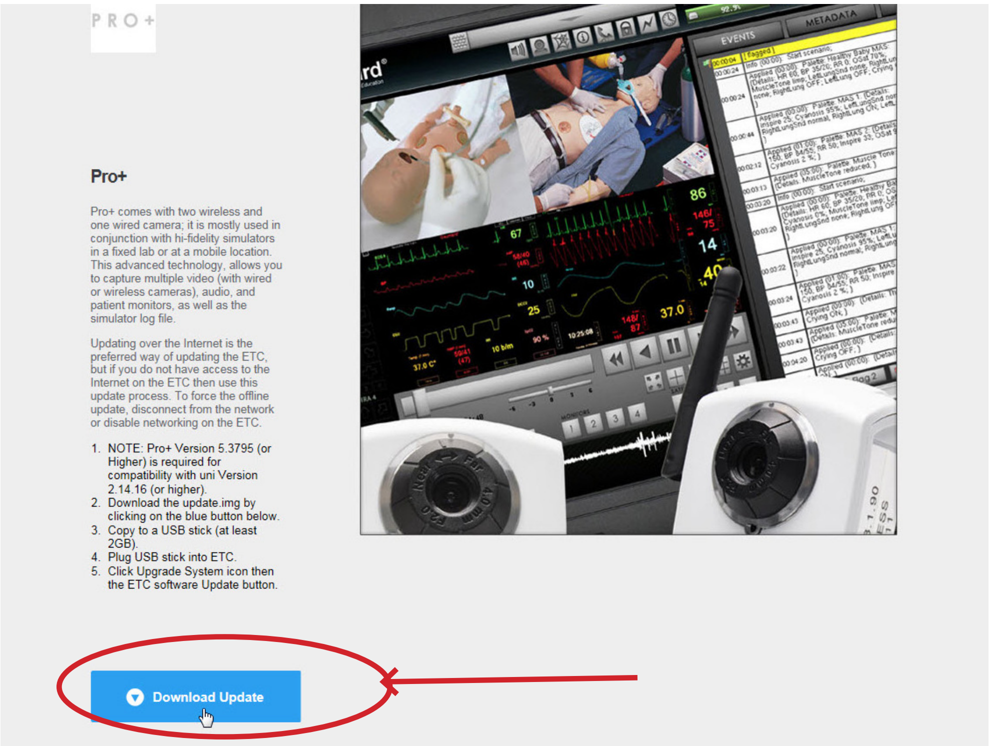
Keep up with the latest!
Software Updates
Download the latest versions

3. Select the Pro+ button from the software download. Scroll down until you reach the Pro+ download section.
4. Select Download Update to download the Pro+ update file



Pro+

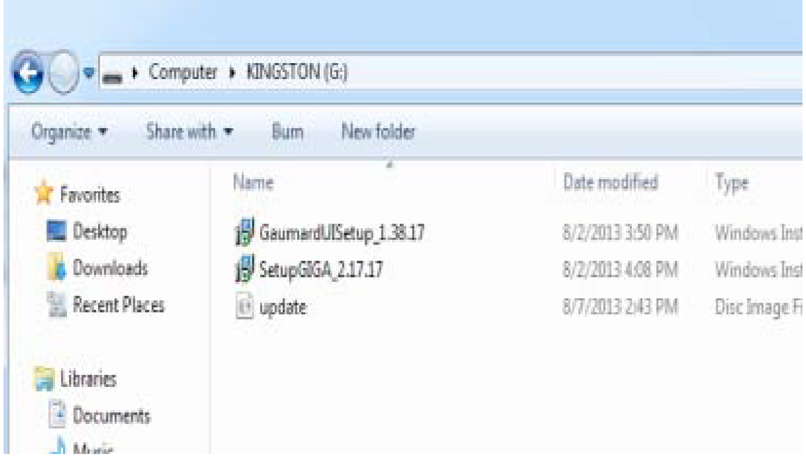
Pro+ comes with two wireless and one wired camera; it is mostly used in conjunction with hi-fidelity simulators in a fixed lab or at a mobile location. This advanced technology, allows you to capture multiple video (with wired or wireless cameras), audio, and patient monitors, as well as the simulator log file.

Updating over the Internet is the preferred way of updating the ETC, but if you do not have access to the Internet on the ETC then use this update process. To force the offline update, disconnect from the network or disable networking on the ETC.

1. NOTE: Pro+ Version 5.3795 (or Higher) is required for compatibility with uni Version 2.14.16 (or higher).
2. Download the update.img by clicking on the blue button below.
3. Copy to a USB stick (at least 2GB).
4. Plug USB stick into ETC.
5. Click Upgrade System icon then the ETC software Update button.

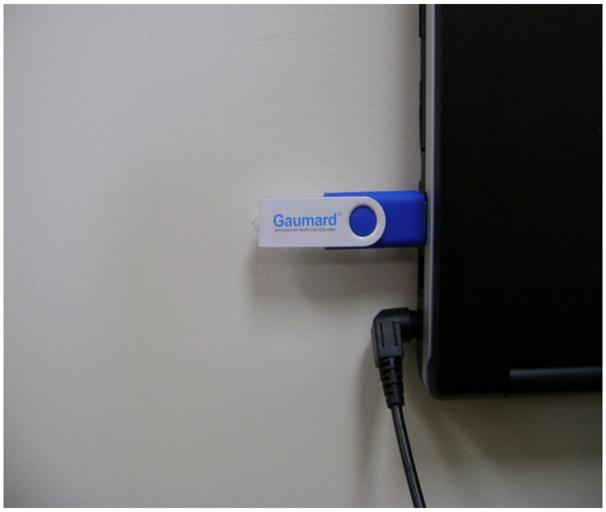
5. Plug a USB Drive that is greater than 2GB into your Windows computer.

6. Locate the downloaded file and place onto the root of the USB (Not in any folders)

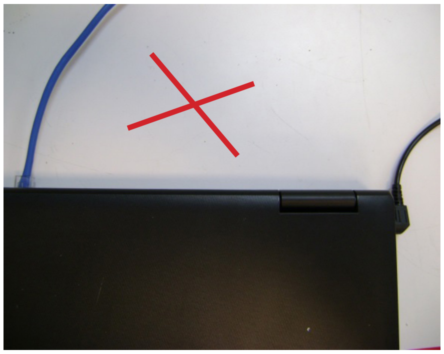

Computer ▸ KINGSTON (G:)
Organize ▾
Share with ▾
Burn
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents

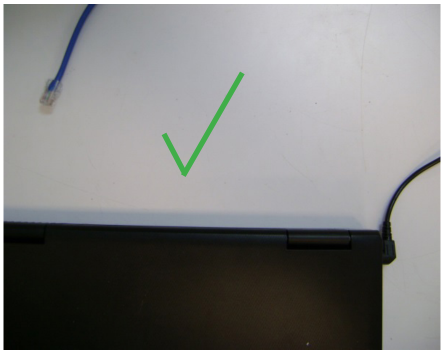
Name	Date modified	Type
GaumardUISetup_1.38.17	8/2/2013 3:50 PM	Windows Ins
SetupGIGA_2.17.17	8/2/2013 4:08 PM	Windows Inst
update	8/7/2013 2:43 PM	Disc Image F

7. Remove USB device from your PC and plug into the ETC Pro+/micro+ computer.



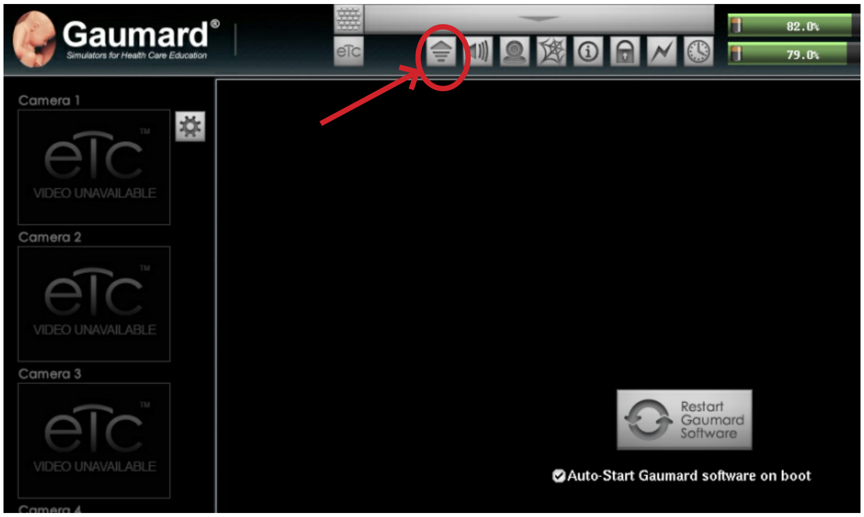
8. Unplug the network cable from the ETC Computer.





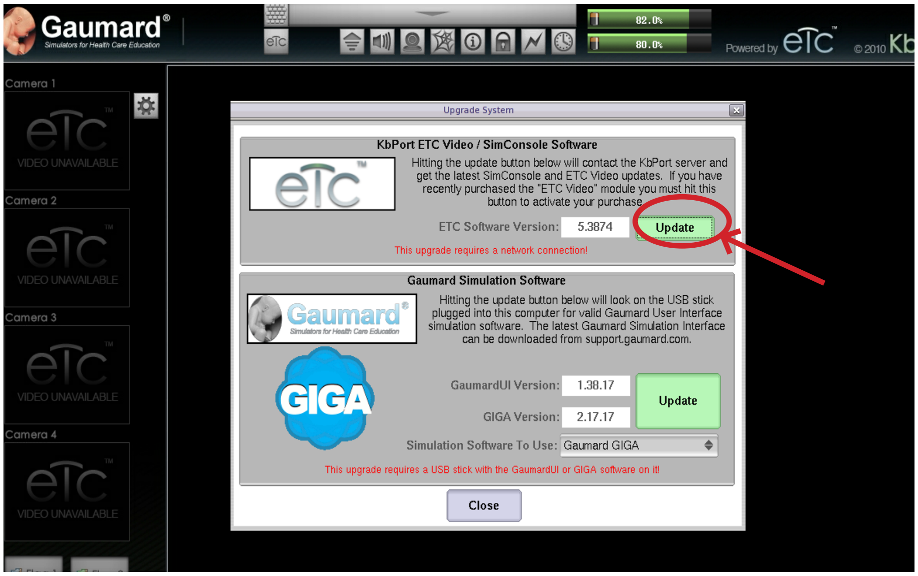
9. Start up the ETC laptop and click the Update System Icon.

10. Wait for the update screen to arrive.


Gaumard®
Simulators for Health Care Education
82.0%
79.0%
Camera 1
VIDEO UNAVAILABLE
Camera 2
VIDEO UNAVAILABLE
Camera 3
VIDEO UNAVAILABLE
Restart Gaumard Software

☑ Auto-Start Gaumard software on boot

11. Click Update (Update may last about an hour)


Gaumard®
Simulators for Health Care Education
82.0%
80.0%
Powered by eTC © 2010 Kb
Camera 1
Camera 2
Camera 3
Camera 4
VIDEO UNAVAILABLE
Upgrade System
GIGA
Update
Close

KbPort ETC Video / SimConsole Software

Hitting the update button below will contact the KbPort server and get the latest SimConsole and ETC Video updates. If you have recently purchased the "ETC Video" module you must hit this button to activate your purchase

ETC Software Version: 5.3874

This upgrade requires a network connection!

Gaumard Simulation Software

Hitting the update button below will look on the USB stick plugged into this computer for valid Gaumard User Interface simulation software. The latest Gaumard Simulation Interface can be downloaded from support.gaumard.com.

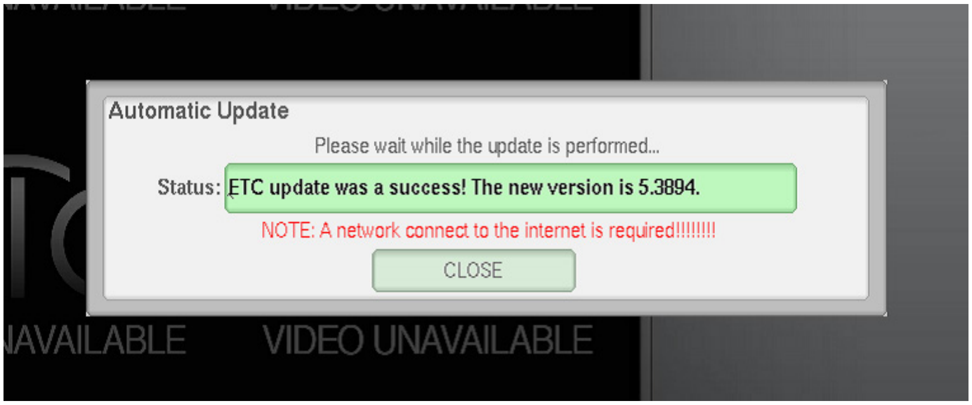
GaumardUI Version: 1.38.17

GIGA Version: 2.17.17

Simulation Software To Use: Gaumard GIGA

This upgrade requires a USB stick with the GaumardUI or GIGA software on it!

12. Reboot ETC after a successful update.


Automatic Update
CLOSE
VIDEO UNAVAILABLE

Please wait while the update is performed...

Status: ETC update was a success! The new version is 5.3894.

NOTE: A network connect to the internet is required!!!!!!!!

13. Plug in the network cable and the off-line update procedure is completed.

Wireless Ad-Hoc Network

UNI generates the vital signs information displayed on the virtual monitor PC. The information is transmitted through a wireless ad-hoc connection between the two computers in real time.

The wireless settings are configured at the factory, so no additional configuration is required.

Use the “Create an ad-hoc Wireless network” tool to configure the wireless ad-hoc link between the two computers. Then, configure the connection between UNI and the Gaumard Monitors software.

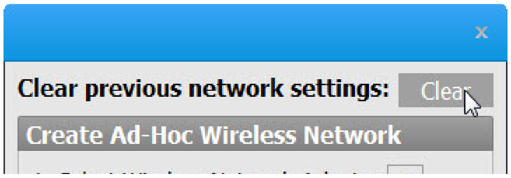
UNI NETWORK CONFIGURATION

Complete the next steps using the “Controller - Create Ad-Hoc Wireless Network” tool built in to UNI software.

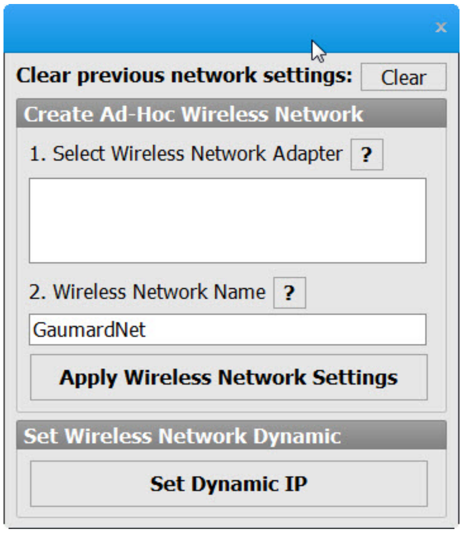
1. From the menu bar, go to Help > “Create ad-hoc Wireless Network”

The “Controller - Create Ad-hoc Wireless Network” window is displayed.

2. Click “Clear previous network settings”

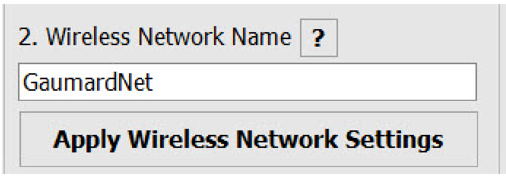

Clear previous network settings:
Clear
Create Ad-Hoc Wireless Network

3. Select the “Wireless Network Adapter”. If the wireless adapter is not listed, first enable the adapter using the Windows® network menu and then return to this window.


Clear previous network settings:
Clear
Create Ad-Hoc Wireless Network
1. Select Wireless Network Adapter
?
2. Wireless Network Name
?
Apply Wireless Network Settings
Set Wireless Network Dynamic
Set Dynamic IP

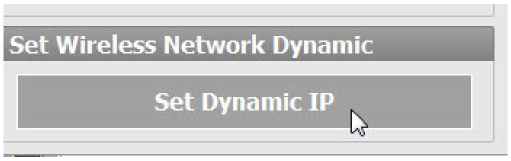
2. Wireless Network Name: GaumardNet

4. Enter a wireless network name (case sensitive). Use the same wireless network name to configure the Gaumard Monitors PC. “GaumardNet” is the required name for Windows® 7 computers.

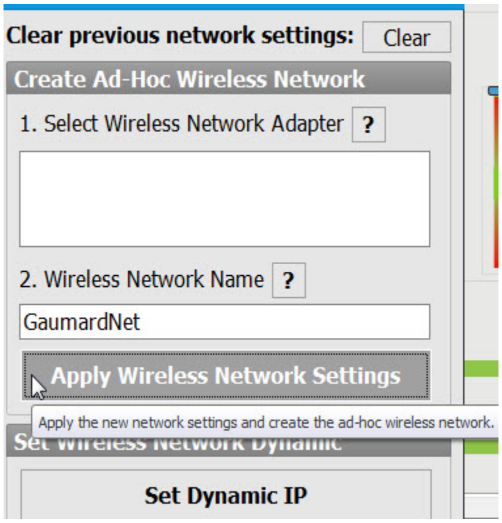

2. Wireless Network Name
?
Apply Wireless Network Settings

2. Wireless Network Name: GaumardNet

5. Click “Set Dynamic IP”.to set the wireless network dynamic.


Set Wireless Network Dynamic
Set Dynamic IP

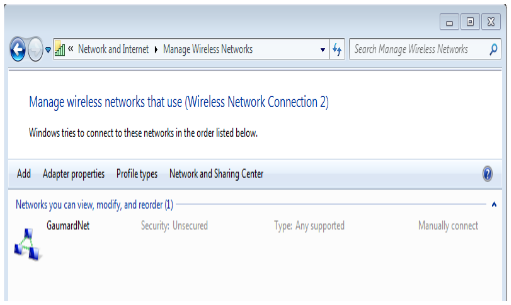
6. Click “Apply Wireless Network Settings” to save the settings.


Clear previous network settings:
Clear
Create Ad-Hoc Wireless Network
1. Select Wireless Network Adapter
?
2. Wireless Network Name
?
Apply Wireless Network Settings
Set Wireless Network Dynamic
Set Dynamic IP

2. Wireless Network Name: GaumardNet

Apply the new network settings and create the ad-hoc wireless network.

7. Exit the UNI software
8. In the case of Windows 7 computers, Navigate to Wireless Network Connection icon the right lower corner of the desktop to select “Open Network and Sharing Center”.
9. Select “Manage Wireless Networks” and make sure that only GaumardNet is listed as shown below.


« Network and Internet ▸ Manage Wireless Networks
Search Manage Wireless Networks
Add
Adapter properties
Profile types
Network and Sharing Center

Manage wireless networks that use (Wireless Network Connection 2)

Windows tries to connect to these networks in the order listed below.

Networks you can view, modify, and reorder (1)

GaumardNet Security: Unsecured Type: Any supported Manually connect

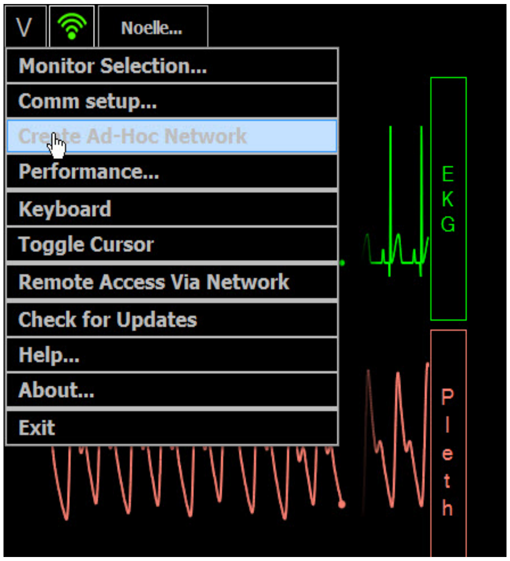
Notice that steps and 9 only applies for a Windows 7 computer.

10. Restart the computer.

GAUMARD MONITORS NETWORK CONFIGURATION

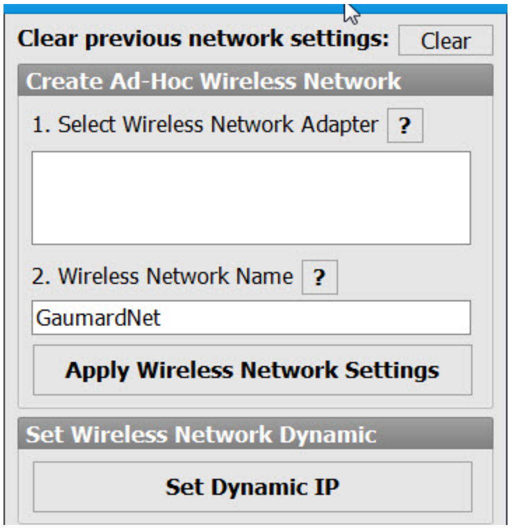
After the UNI control computer is configured, complete the next steps using the “Create an ad-hoc network tool” included in Gaumard Monitors software.

1. On the virtual monitor computer, click the Gaumard Monitors icon to start the vital signs software.
2. Click the V menu near the top left corner and select “Create Ad-Hoc Network”.


V
Noelle...
Monitor Selection...
Comm setup...
Create Ad-Hoc Network
Performance...
Keyboard
Toggle Cursor
Remote Access Via Network
Check for Updates
Help...
About...
Exit
EKG
Pleth

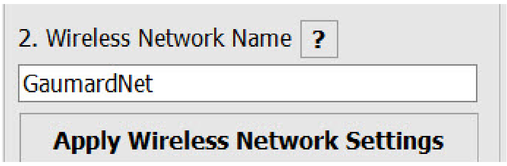
The “Virtual Monitor - Create ad-hoc Wireless Network” window is displayed.

3. Select “Wireless Network Adapter”. If the wireless adapter is not listed, first enable the adapter using the Windows® network menu and then return to this window.


Clear previous network settings:
Clear
Create Ad-Hoc Wireless Network
1. Select Wireless Network Adapter
?
2. Wireless Network Name
?
Apply Wireless Network Settings
Set Wireless Network Dynamic
Set Dynamic IP

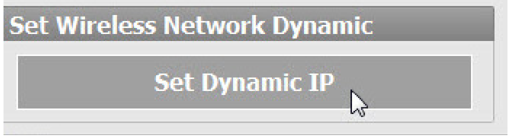
GaumardNet

4. Enter a wireless network name (case sensitive). Use the same name entered in the controller computer. “GaumardNet” is the required name for Windows® 7 computers.

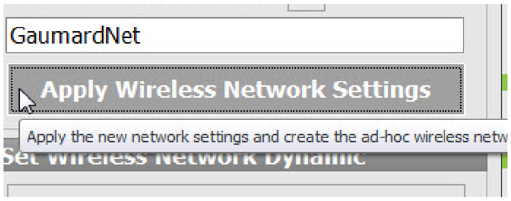

2. Wireless Network Name
?
Apply Wireless Network Settings

GaumardNet

5. Click “Set Dynamic IP”.to set the wireless network dynamic.


Set Wireless Network Dynamic
Set Dynamic IP

6. Click “Apply Wireless Network Settings” to save the settings.


Apply Wireless Network Settings
Set Wireless Network Dynamic

GaumardNet

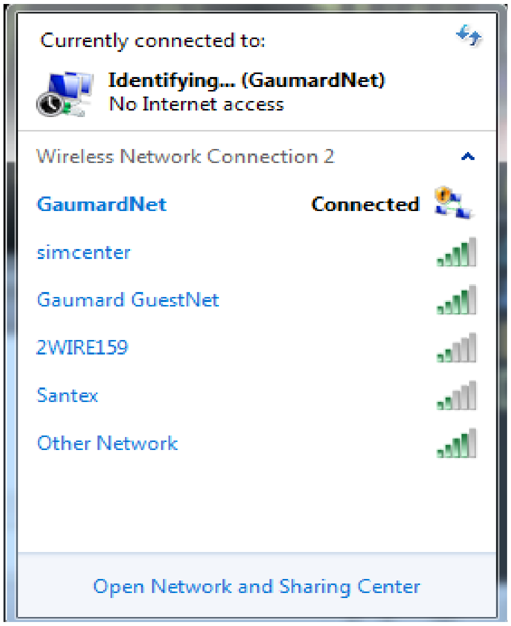
Apply the new network settings and create the ad-hoc wireless netw

7. Restart the computer.

CONFIGURE THE VITAL SIGNS BROADCAST

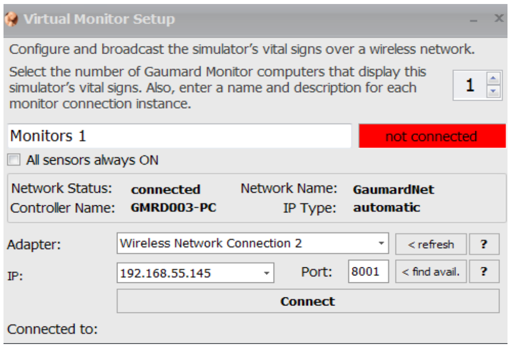
After the wireless ad-hoc link is established between both computers, complete next steps to configure the transmission of the vital signs information.

1. Verify that both computers are connected to the GaumardNet network using Windows® wireless connection menu. If the computers are not connected, select the “GaumardNet” network and click “Connect” manually.


Currently connected to:
Identifying... (GaumardNet)
No Internet access
Wireless Network Connection 2
GaumardNet
Connected
simcenter
Gaumard GuestNet
2WIRE159
Santex
Other Network
Open Network and Sharing Center

2. Start the UNI control software.
3. On the UNI menu bar, click Monitors> Configuration.

The “Virtual Monitor Setup” window is displayed.


Virtual Monitor Setup

Configure and broadcast the simulator’s vital signs over a wireless network.

Select the number of Gaumard Monitor computers that display this simulator’s vital signs. Also, enter a name and description for each monitor connection instance. 1

Monitors 1 not connected

☐ All sensors always ON

Network Status: **connected** Network Name: **GaumardNet**
Controller Name: **GMRD003-PC** IP Type: **automatic**

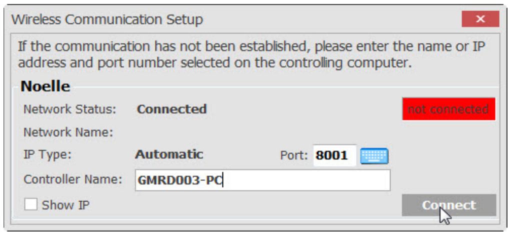
Adapter: Wireless Network Connection 2
IP: 192.168.55.145 Port: 8001

Connected to:

< refresh
?
< find avail.
?
Connect

4. Set the adapter to “Wireless network connection”
5. Verify the network status and network name, then click “Connect” to begin transmitting the vital signs information.
6. Write down the “Controller Name” and “Port number”.
7. Start the Gaumard Monitors software on the virtual monitor PC.
8. Click the “V” menu near the top left corner, and then select “Comm Setup”.

The “TCP Comm Setup” window is displayed.


Wireless Communication Setup

If the communication has not been established, please enter the name or IP address and port number selected on the controlling computer.

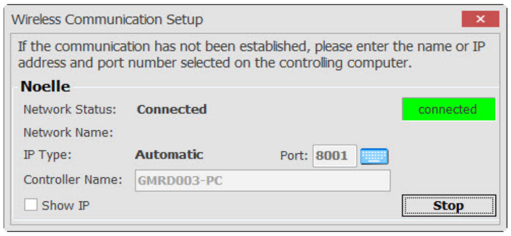
Noelle

Network Status: **Connected** not connected
Network Name:
IP Type: **Automatic** Port: **8001**
Controller Name: **GMRD003-PC**

☐ Show IP

Connect

9. Enter the “Controller name” and “Port number” displayed on the UNI “Virtual Monitor Setup” window.
10. Click “Connect” to accept the incoming connection.


Wireless Communication Setup

If the communication has not been established, please enter the name or IP address and port number selected on the controlling computer.

Noelle

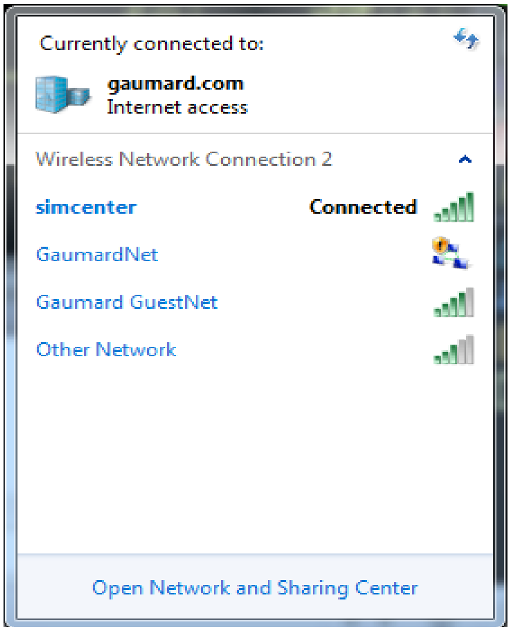
Network Status: **Connected** connected
Network Name:
IP Type: **Automatic** Port: 8001
Controller Name: GMRD003-PC

☐ Show IP

Stop

To connect both computers using a local internet network, follow the steps below:

1. Verify that both computers have applied “Set Wireless Network Dynamic”. Refer to UNI and Gaumard Monitors network configuration sections for instructions.
2. Disconnect both computers to the GaumardNet network and connect them to the local network manually using Windows® wireless connection menu.

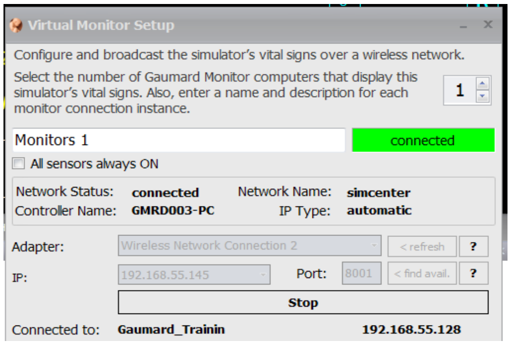


Currently connected to:
gaumard.com
Internet access

Wireless Network Connection 2

simcenter Connected
GaumardNet
Gaumard GuestNet
Other Network

3. Repeat the same steps listed above to connect the UNI software to the Gaumard Monitors software.



Virtual Monitor Setup

Configure and broadcast the simulator's vital signs over a wireless network.

Select the number of Gaumard Monitor computers that display this simulator's vital signs. Also, enter a name and description for each monitor connection instance. 1

Monitors 1 connected

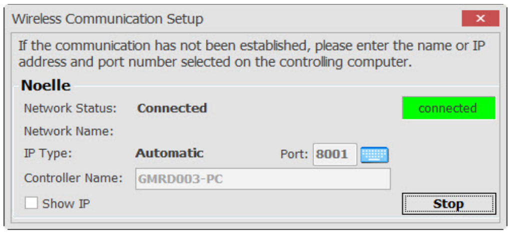
☐ All sensors always ON

Network Status: connected
Network Name: simcenter
Controller Name: GMRD003-PC
IP Type: automatic

Adapter: Wireless Network Connection 2

IP: 192.168.55.145
Port: 8001

Connected to: Gaumard_Trainin 192.168.55.128



Wireless Communication Setup

If the communication has not been established, please enter the name or IP address and port number selected on the controlling computer.

Noelle

Network Status: Connected
connected
Network Name:
IP Type: Automatic
Port: 8001
Controller Name: GMRD003-PC
☐ Show IP

Microphone Boost for Streaming Audio

Use the instructions below to increase the streaming audio volume. The Headset must be connected to the tablet in order to adjust the microphone volume properties. In addition, adjust the recording control on the headset's physical control to high.

1. Right click on the speaker icon located on the bottom right corner of the laptop's taskbar.
2. The speaker menu is displayed. Click on the recording devices option.
3. The sound properties window and recording tab are displayed. Right-click the microphone option and select properties.
4. From the microphone properties sub menu, select the Levels tab. Use the microphone control to decrease and increase the recording volume. For an additional increase in recording volume, use the microphone boost control.

Microphone boost increases volume and saturation which can decrease overall clarity. For optimal clarity, adjust the microphone volume to 100 and the microphone boost to +10.

5. Click OK to save the changes to the volumes on the microphone properties menu.
6. Click OK to close the Sound properties window.
7. It might be necessary to re-adjust the microphone settings to accommodate environment noise.

Warranty

EXCLUSIVE ONE-YEAR LIMITED WARRANTY

Gaumard warrants that if the accompanying Gaumard product proves to be defective in material or workmanship within one year from the date on which the product is shipped from Gaumard to the customer, Gaumard will, at Gaumard's option, repair or replace the Gaumard product.

- This limited warranty covers all defects in material and workmanship in the Gaumard product, except:
- Damage resulting from accident, misuse, abuse, neglect, or unintended use of the Gaumard product;
- Damage resulting from failure to properly maintain the Gaumard product in accordance with Gaumard product instructions, including failure to property clean the Gaumard product; and
- Damage resulting from a repair or attempted repair of the Gaumard product by anyone other than Gaumard or a Gaumard representative.

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This limited warranty applies only to the products manufactured and produced by Gaumard. This limited warranty does not apply to any products provided along with the Gaumard product that are manufactured by third parties. For example, third-party products such as computers (desktop, laptop, tablet, or handheld) and monitors (standard or touch-screen) are not covered by this limited warranty. Gaumard does not provide any warranty, express or implied, with respect to any third-party products. Defects in third-party products are covered exclusively by the warranty, if any, provided by the third-party.

- Any waiver or amendment of this warranty must be in writing and signed by an officer of Gaumard.
- In the event of a perceived defect in material or workmanship of the Gaumard product, the first purchaser must:
- Contact Gaumard and request authorization to return the Gaumard product. Do NOT return the Gaumard product to Gaumard without prior authorization.
- Upon receiving authorization from Gaumard, send the Gaumard product along with copies of (1) the original bill of sale or receipt and (2) this limited warranty document to Gaumard at 14700 SW 136 Street, Miami, FL, 33196-5691 USA.

If the necessary repairs to the Gaumard product are covered by this limited warranty, then the first purchaser will pay only the incidental expenses associated with the repair, including any shipping, handling, and related costs for sending the product to Gaumard and for sending the product back to the first purchaser. However, if the repairs are not covered by this limited warranty, then the first purchaser will be liable for all repair costs in addition to costs of shipping and handling.

Extended Warranty In addition to the standard one year of coverage, the following support plans are available: Two-Year Extension (covers second and third years)

Call for pricing (USA only)Tips on Creating Scenarios

Gaumard®
Simulators for Health Care Education

Contact Us

E-mail Technical Support: support@gaumard.com

Before contacting Tech Support you must:

1. Have the simulator's Serial Number
2. Be next to the simulator if troubleshooting is needed.

E-mail Sales and Customer Service: sales@gaumard.com

Phone: Toll-free in the USA: (800) 882-6655
Worldwide: 01 (305) 971-3790

Fax: (305) 667-6085

Post: Gaumard Scientific
14700 SW 136 Street
Miami, FL 33196-5691
USA

Office hours: Monday-Friday, 8:30am - 4:30pm EST (GMT-5, -4 Summer Time)

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